

STATE OF OHIO
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL SURVEY

Information Circular No. 34

LAKE ERIE BATHYTHERMOGRAPH RECORDINGS

1952 - 1966

Compiled by
Charles E. Herdendorf

Columbus
1967

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Ralph J. Bernhagen, Chief

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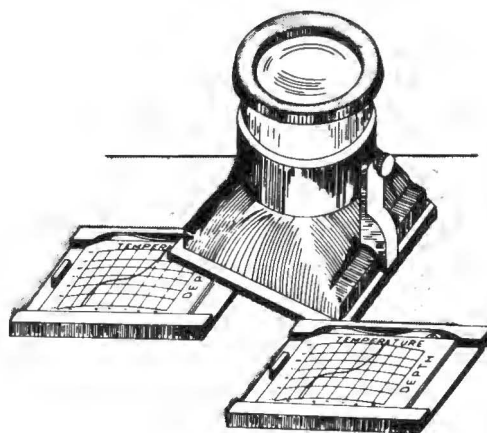
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Figure 1.-Schematic diagram of a bathythermograph
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Plate 1.-Locations of bathythermograph
 stations In pocket



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INTRODUCTION

During the past 15 years, the Lake Erie Geological Research Program of the Ohio Department of Natural Resources has taken hundreds of temperature recordings throughout Lake Erie. In order to make these data available to other researchers the following report has been compiled.

Woods Hole Oceanographic Institution type bathythermographs (BT), on loan from the Department of the Navy, were used to record water temperatures. The torpedo-shaped body of a bathythermograph is 30 inches long, constructed of brass, and weighs about 20 pounds (fig. 1). This instrument is capable of recording the temperature of a vertical column of water within a range of 0-200 feet. A permanent graphical record or trace of water temperature, plotted against depth, is scribed by a stylus on a smoked or gold-plated glass slide. A depth (pressure) element in the instrument drives the glass slide at right angles to the stylus which is driven by a thermal element.

Each trace was read by comparing it with a grid calibrated for the instrument that made the trace, and with the aid of a magnifying grid viewer. On those measurements where hysteresis occurred, the traces with the sharpest and smoothest curves were read. The calibration and operation of the thermal element of the bathythermograph were periodically checked at the surface with a hand thermometer. The accuracy of the values recorded in the report is considered to be $\pm 0.5^{\circ}\text{F}$.

Bathythermograph recordings were made both from a stationary research vessel and underway. Recordings were taken routinely on many cruises in which the study of bottom sediments and water movements was the primary objective. Other cruises were made specifically to study the vertical temperature structure of the lake. Most of the recordings taken in 1952 through 1955

in western Lake Erie and in the vicinity of the Lorain-Vermilion commercial sand dredging area were made in conjunction with water-movement and bottom-sediment investigations. Most of the measurements in central and eastern Lake Erie from 1953 to 1955 were part of a project to study the thermal structure of the lake along its longitudinal and transverse axes. During this project a station was also established over the deepest part of the lake and repetitive recordings were made at half-hour intervals for 20 hours. All of the 1960 recordings were from a single station (SY-1) in central Lake Erie and were part of a two-day synoptic study of water properties throughout Lake Erie, a study in which many research organizations participated. Bathythermograph recordings made in 1962 and 1963 in central Lake Erie were taken in conjunction with current and bottom-deposit studies in the Conneaut, Ashtabula, and Fairport area. Those made in western Lake Erie in 1963 were taken at bottom boring sites (I-75 to I-81) in the Bass Islands area and at water sampling stations (W-18 to W-300) of a one-day synoptic survey throughout the western end of the lake. Bathythermograph recordings were taken from four Department of Natural Resources research vessels during this survey. Measurements recorded in 1966 (10-A to 145-O) were made during a water sampling cruise in western Lake Erie and at a station (DH-1) in eastern Lake Erie over the deepest sounding in the lake.

The bathythermograph recordings in this report are arranged chronologically, except for a few cases, with station numbers, dates, and times listed above the temperatures for the various depths. The index indicates the general location of bathythermograph stations. The specific station locations are shown on plate 1.

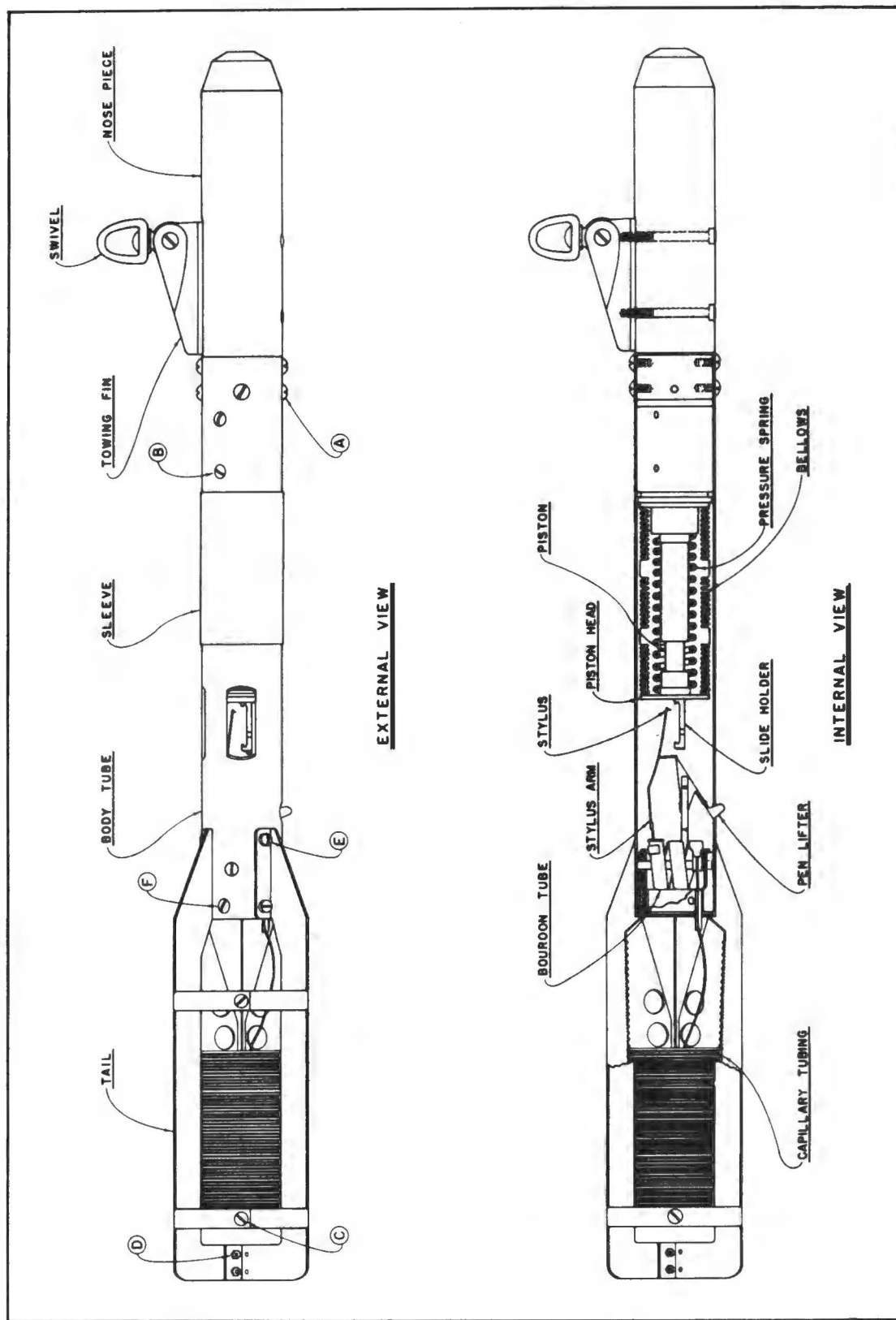


FIGURE 1. - Schematic diagram of a bathythermograph (courtesy of Woods Hole Oceanographic Institution).

INDEX AND GENERAL LOCATIONS OF STATIONS

<i>Bathythermograph stations - 1952</i>					
<i>Station</i>	<i>Location</i>	<i>Page</i>			
64, 99, 100	Western Lake Erie, island area	5	1133-1134	Western Lake Erie, west of South Bass Island	16
101-103	Central Lake Erie, north of Vermilion	5	1135A-1139	Western Lake Erie, Maumee Bay	16
104-113	Western Lake Erie, island area	5	1140-1143, 1146	Eastern Lake Erie, southeast of Long Point	17
			1147-1164	Western Lake Erie, Maumee Bay to Detroit River	17-18
<i>Bathythermograph stations - 1953</i>			1165	Western Lake Erie, Maumee Bay to Turtle Island	18
<i>Station</i>	<i>Location</i>	<i>Page</i>			
149,	Western Lake Erie, Sandusky Bay to Bass Islands	6	1166-1173	Western Lake Erie, Maumee Bay to Middle Sister Island to Pelee Island	18
200-207					
208-228	Western Lake Erie, Sandusky Bay to Pelee Island	6	1174-1189	Western Lake Erie, Maumee Bay	18-19
229-240,	Central Lake Erie, Sandusky Bay to Erieanu to Lorain	7-8	1190	Western Lake Erie, north of Crane Creek	19
242-246					
247-263	Central Lake Erie, Sandusky Bay to Avon Point to east of Kelleys Island	8-9	1191-1194, 1205-1208	Western Lake Erie, Maumee Bay	19
1000,	Central Lake Erie, Sandusky Bay to Lorain-Vermilion commercial sand dredging area	9	<i>Bathythermograph stations - 1954</i>		
1002-1017			<i>Station</i>	<i>Location</i>	<i>Page</i>
			1209-1215,	Western Lake Erie, Maumee Bay	20
1019-1043	Western Lake Erie, Sandusky Bay to Crane Creek to Toledo Harbor Light to Detroit River Light to Southeast Shoal Light to Sandusky Bay	9-10	1217-1228		
			1229-1237	Western Lake Erie, Maumee Bay to Middle Sister Island to Bass Islands area	20
1044-1050,	Western Lake Erie, Sandusky Bay to Bass Islands to north of Kelleys Island to Sandusky Bay	10,11	1238	Western Lake Erie, southeast of Colchester	20
1052,			1239-1249	Central Lake Erie, Sandusky Bay to Erieanu	20-21
1056-1061			1250	Central Lake Erie, southeast of Erieanu	21
1051,	Central Lake Erie, Sandusky Bay to Lorain-Vermilion commercial sand dredging area	10,11	1251-1257	Central Lake Erie, Fairport to Port Stanley	21-22
1053-1055			1258-1262	Central Lake Erie, Lorain to Sandusky Bay	22
1062-1103,	Central and eastern Lake Erie, Sandusky Bay to Long Point	11-16	1263-1307	Central Lake Erie, Sandusky Bay to Lorain-Vermilion commercial sand dredging area	22-24
1105-1130					
1131	Western Lake Erie, north of Lakeside	16	1308	Eastern Lake Erie, southeast of Long Point	24
1132	Western Lake Erie, Sandusky Bay mouth	16	1309	Central Lake Erie, north of Fairport	24

Bathythermograph stations - 1955

<i>Station</i>	<i>Location</i>	<i>Page</i>
1310-1322	Central Lake Erie, Sandusky Bay to Lorain-Vermilion commercial sand dredging area	25
1323	Central Lake Erie, north of Fairport	25

Bathythermograph stations - 1960

<i>Station</i>	<i>Location</i>	<i>Page</i>
SY-1	Central Lake Erie, north of Lorain	26-28

Bathythermograph stations - 1962

<i>Station</i>	<i>Location</i>	<i>Page</i>
C-1-C-27	Central Lake Erie, Conneaut area	29-30

Bathythermograph stations - 1963

<i>Station</i>	<i>Location</i>	<i>Page</i>
I-75-I-78, I-81	Western Lake Erie, Bass Islands area	31
W-14-W-300 (not inclusive)	Western Lake Erie (low numbers west, high numbers east)	31-34
C-28-C-51 (not inclusive)	Central Lake Erie, Ash-tabula area	34-35
C-52	Central Lake Erie, north-west of Fairport	35

Bathythermograph stations - 1966

<i>Station</i>	<i>Location</i>	<i>Page</i>
10-A-145-O (not inclusive)	Western Lake Erie (low numbers east, high numbers west)	36
DH-1	Eastern Lake Erie, south-east of Long Point	36

BATHYTHERMOGRAPH RECORDINGS - 1952

Station	64	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113
Date*	5/9	11/12	11/12	11/12	11/12	11/12	11/12	11/12	11/12	11/14	11/14	11/14	11/14	11/14	11/14	11/14
Time**	1500	0825	0855	0945	1000	1128	1215	1305	1355	0840	0935	1028	1120	1215	1308	1400
Depth (ft.)	Temperature(°F)															
0.0	52.5	43.5	44.6	44.6	44.4	45.1	43.7	43.9	43.9	43.5	44.1	43.9	43.7	43.7	43.5	43.9
2.5	52.5	43.5	44.6	44.6	44.4	45.1	43.7	43.9	43.9	43.5	44.1	43.9	43.7	43.7	43.5	43.9
5.0	52.5	43.5	44.6	44.6	44.4	45.1	43.7	43.9	43.9	43.5	44.1	43.9	43.7	43.7	43.5	43.9
7.5	52.5	43.5	44.6	44.6	44.4	45.1	43.7	43.9	43.9	43.5	44.1	43.9	43.5	43.7	43.5	43.9
10.0	52.5	43.5	44.6	44.6	44.4	45.1	43.7	43.9	43.9	43.5	44.1	43.9	43.5	43.7	43.5	43.9
12.5	52.5	43.5	44.6	44.6	44.4	45.1	43.7	43.9	43.9	43.5	44.1	43.9	43.5	43.7	43.5	43.9
15.0	52.5	43.5	44.6	44.6	44.4	45.1	43.7	43.9	43.9	43.5	44.1	43.7	43.5	43.7	43.5	43.9
17.5	52.5	43.5	44.6	44.6	44.4	45.1	43.7	43.9	43.9	43.5	44.1	43.7	43.5	43.7	43.5	43.9
20.0	52.5	43.5	44.6	44.6	44.4	45.1	43.7	43.9	43.9	43.5	44.1	43.7	43.5	43.7	43.5	43.7
22.5	52.5	43.5	44.6	44.6	44.4	45.1	43.7	43.9	43.9	43.5	44.1	43.7	43.5	43.7	43.5	43.7
25.0	52.5	43.5	44.6	44.6	44.4	45.1	43.7	43.9	43.9	43.5	44.1	43.7	43.5	43.7	43.5	43.7
27.5	52.5	43.5	44.6	44.6	44.4	45.1		43.9	43.9	43.5	44.1	43.7	43.5	43.7	43.5	43.7
30.0	52.5	43.5	44.6	44.6	44.4	45.1		43.9	43.9	43.5	44.1	43.7	43.5	43.7	43.5	43.7
32.5	52.5		44.6	44.6	44.4	45.1			43.9	43.5	44.1	43.7	43.5	43.7	43.5	43.7
35.0			44.6	44.6	44.4					43.5					43.5	

*Month/day.

**24 hour clock.

BATHYTHERMOGRAPH RECORDINGS - 1953

Station	149	200	201	202	203	204	205	206	207	208	209	210	211	212	213
Date	6/22	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/24	6/24	6/24	6/24	6/24	6/24
Time	--	1357	1411	1422	1433	1444	1455	1506	1516	1135	1140	1144	1148	1153	1157
Depth (ft.)	Temperature(°F)														
0.0	75.2	74.8	75.7	75.9	75.2	74.5	74.3	73.6	74.7	73.6	74.5	73.0	73.0	73.2	73.2
2.5	74.4	74.8	75.6	75.7	75.0	74.5	74.3	73.6	74.7	73.4	74.5	72.9	72.9	73.2	73.2
5.0	74.0	74.8	75.0	75.5	74.9	74.0	74.3	73.5	74.7	72.0	74.0	72.9	72.9	73.2	73.2
7.5	73.5	74.8	74.8	75.2	74.7	73.6	73.6	73.4	74.0	71.4	73.6	72.9	72.9	73.2	73.2
10.0	72.8	74.8	74.7	74.7	73.9	72.9	72.9	73.2	72.9	71.2	73.4	72.9	72.7	73.0	73.0
12.5	72.8	74.7	74.5	74.5	73.9	72.5	72.5	72.9	72.3	71.1	73.4	72.9	72.7	73.0	72.9
15.0	72.6	74.7	74.3	74.4	73.9	72.3	72.3	72.7	72.0	71.0	73.4	72.8	72.7	73.0	72.9
17.5	72.5	74.7	74.1	74.3	73.9	72.1	72.1	72.6	71.6	70.9	73.4	72.7	72.7	73.0	72.8
20.0	72.5	74.7	73.8	74.3	73.9	72.1	71.8	72.5	70.3	70.9	73.4	72.7	72.7	73.0	72.7
22.5	72.5	74.7	72.7	74.2	73.8		71.8	72.5	69.1	70.9	73.4	72.7	72.7	72.9	72.7
25.0			72.5	74.1	73.8		71.6	72.5	69.1	70.9		72.7		72.9	
27.5			72.5	74.1			71.3	72.0	69.1	70.9		72.5		72.9	
30.0			72.5	73.9			70.7	68.9	69.1					72.9	
32.5				73.9			70.7		69.1					72.9	
35.0				73.9										72.9	
37.5														72.9	
40.0														72.5	

BATHYTHERMOGRAPH RECORDINGS - 1953

Station	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228
Date	6/24	6/24	6/24	6/25	6/25	6/25	6/25	6/25	6/25	6/25	6/25	6/25	6/25	6/25	6/25
Time	1204	1211	1218	0920	0935	0951	1008	1025	1042	1058	1114	1132	1150	1206	1258
Depth (ft.)	Temperature(°F)														
0.0	73.2	73.0	73.0	73.2	72.5	71.4	70.7	71.4	70.7	69.8	70.5	70.7	71.2	71.2	71.6
2.5	73.2	73.0	73.0	73.2	72.5	71.4	70.5	71.4	70.7	69.8	70.3	70.7	71.2	71.2	71.6
5.0	73.2	73.0	72.9	72.9	72.5	71.4	70.5	71.4	70.6	69.8	70.3	70.7	71.2	71.2	71.5
7.5	73.2	73.0	72.9	72.9	72.5	71.4	70.5	71.4	70.5	69.8	70.3	70.7	71.2	71.2	71.4
10.0	73.2	73.0	72.9	72.7	72.5	71.4	70.5	71.4	70.5	69.8	70.3	70.7	71.1	71.1	71.3
12.5	73.2	73.0	72.9	72.7	72.3	71.4	70.5	71.2	70.5	69.8	70.2	70.7	71.1	71.1	71.2
15.0	73.2	73.0	72.9	72.7	72.3	71.4	70.5	71.1	70.5	69.8	70.2	70.4	70.9	71.0	71.2
17.5	73.2	73.0	72.9	72.7	72.2	71.4	70.5	71.1	70.5	69.8	70.2	70.0	70.8	70.9	71.1
20.0	73.2	73.0	72.9	72.7	72.1	71.4	70.5	71.1	70.5	69.8	70.2	68.9	70.7	70.9	71.1
22.5	73.2			72.7	72.0	71.2	70.5	71.1	70.5	69.8	70.0	68.0	70.2	70.9	70.9
25.0	73.2			72.7	71.9	71.1	70.3	70.9	70.4	69.8	70.0	67.5	70.0	70.8	70.9
27.5	73.2			72.7	71.8	71.1	70.3	70.9	70.3	69.8	69.9	67.3	69.6	70.7	70.9
30.0					71.8	71.1	70.3	70.9	70.3	69.8	69.8	67.1	69.1	70.5	
32.5					71.6	71.1	70.3	70.7	70.3	69.8	68.0	66.9	68.5	70.3	
35.0					64.8	68.0	70.3	63.5	68.9	69.8	66.2	62.4	68.5	70.2	
37.5					64.5	66.0	69.6	63.4	65.8	67.1			68.5	69.8	
40.0					64.2	64.4	68.9	63.1	63.5	66.4			68.5	69.4	
42.5					64.0	64.2	63.0	62.8	63.5						
45.0							63.0		63.5						
47.5									63.5						

BATHYTHERMOGRAPH RECORDINGS - 1953

[illegible]

[illegible]

BATHYTHERMOGRAPH RECORDINGS - 1953

Station	261	262	263	1000	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
Date	7/6	7/6	7/6	7/10	7/13	7/13	7/13	7/13	7/13	7/13	7/13	7/13	7/13	7/13
Time	1508	1543	1619	1100	1115	1148	1219	1246	1335	1435	1535	1635	1735	1815
Depth (ft.)	Temperature(°F)													
0.0	72.3	73.4	74.1	74.0	75.4	74.2	73.8	75.8	74.0	74.8	74.2	74.0	74.4	74.0
2.5	72.3	73.4	74.1	74.0	75.4	73.2	73.5	73.2	73.6	72.6	73.3	74.0	74.3	74.0
5.0	72.3	73.4	74.1	74.0	75.3	73.2	73.0	72.8	73.5	72.5	73.3	74.0	74.0	73.8
7.5	72.3	73.4	74.1	74.0	75.0	73.1	72.9	72.7	73.2	72.4	72.6	74.0	73.0	73.1
10.0	72.1	73.4	74.1	73.9	74.7	73.1	72.8	72.5	73.0	72.3	72.3	73.0	72.7	73.0
12.5	72.1	73.4	74.1	73.8	74.3	73.1	72.8	72.5	73.0	72.2	72.2	72.5	72.6	72.9
15.0	72.1	73.4	73.9	73.7	74.2	73.0	72.7	72.4	73.0	72.1	72.1	72.2	72.5	72.8
17.5	72.0	73.4	73.9	73.6	74.0	73.0	72.7	72.4	73.0	72.0	72.0	72.1	72.5	72.4
20.0	71.6	73.2	73.8	73.4	73.9	73.0	72.7	72.3	73.0	72.0	72.0	72.0	72.4	72.3
22.5	71.6	73.2	73.8	73.0	73.9	73.0	72.7	72.2	73.0	72.0	72.0	72.0	72.3	72.2
25.0	71.6	73.2	73.6		73.9	73.0	72.7	72.1	72.9	72.0	72.0	72.0	72.2	72.1
27.5	71.5	73.1	73.5			72.9	72.7	72.1	72.9	72.0	72.0	72.0	72.2	72.0
30.0	71.4	73.0	73.4			72.9	72.7	72.1	72.9	72.0	72.0	72.0	72.1	72.0
32.5	71.2	73.0	73.4			72.9	72.7	72.1	72.9	71.9	72.0	72.0	72.1	72.0
35.0	71.1	72.9	73.4			72.9	72.7	72.1	72.9	71.8	72.0	72.0	72.0	72.0
37.5	71.1	72.8	73.4			72.9	72.7	72.1	72.7	71.7	71.7	71.8	72.0	72.0
40.0	71.1	72.7	73.4			72.9	72.7	72.0	69.0	70.0	66.3	71.0	72.0	72.0
42.5	70.7	64.4	72.5			63.0	72.7	71.5	67.0	67.2		65.5	68.0	64.8
45.0	67.1	56.5	71.4			61.3	61.5	66.5					68.0	
47.5	61.0	56.5						64.5						
50.0	55.4	56.5						63.5						
52.5	55.2	56.5												

BATHYTHERMOGRAPH RECORDINGS - 1953

Station	1012	1013	1014	1015	1016	1017	1019	1020	1021	1022	1023	1024	1025	1026
Date	7/13	7/14	7/14	7/14	7/14	7/14	7/15	7/16	7/16	7/16	7/16	7/16	7/16	7/16
Time	1835	0809	1000	1100	1315	1430	1000	1100	1240	1625	1912	1936	2004	2020
Depth (ft.)	Temperature(°F)													
0.0	73.7	72.8	72.8	72.9	76.0	76.0	76.0	77.0	76.4	78.2	77.0	78.0	78.0	77.9
2.5	73.7	72.8	72.8	72.9	73.3	75.5	75.9	77.0	76.3	78.0	77.0	78.0	78.0	77.9
5.0	73.7	72.8	72.7	72.9	73.1	74.0	75.8	77.0	76.2	77.8	77.0	78.0	78.0	77.9
7.5	73.7	72.8	72.6	72.8	72.8	73.5	75.5	76.9	75.8	77.0	77.0	78.0	78.0	77.9
10.0	73.6	72.8	72.5	72.7	72.7	73.3	75.3	76.0		75.5	77.0	78.0	77.8	77.9
12.5	72.5	72.8	72.5	72.7	72.7	73.2	75.2	76.0		74.5	77.0	78.0	77.4	77.5
15.0	72.5	72.8	72.5	72.6	72.7	73.2	75.2	76.0				75.5	76.0	77.2
17.5	72.4	72.8	72.5	72.5	72.7	73.1	75.2	76.0				74.0	75.8	76.5
20.0	72.3	72.7	72.4	72.5	72.6	73.1	75.1	76.0					75.0	76.3
22.5	72.2	72.6	72.4	72.5	72.6	73.1	75.1	74.6					73.6	75.0
25.0	72.1	72.6	72.2	72.5	72.5	73.0		74.2						
27.5	72.1	72.5	72.1	72.5	72.4	73.0		74.1						
30.0	72.0	72.4	72.0	72.0	72.3	72.9								
32.5	72.0	72.2	71.6	71.8	72.2	72.8								
35.0	72.0	71.7	71.3	70.0	72.1	72.7								
37.5	72.0	69.0	69.5	64.2	71.8	72.3								
40.0	72.0	64.9	69.3		71.1	72.0								
42.5	65.5	63.4	69.2		59.5	65.0								
45.0		62.2				63.0								
47.5						60.6								
50.0						60.2								

BATHYTHERMOGRAPH RECORDINGS - 1953

Station Date Time	1027 7/16 2030	1029 7/16 2104	1030 7/16 2134	1031 7/16 2206	1032 7/16 2231	1033 7/16 2312	1034 7/16 2350	1035 7/17 0025	1036 7/17 0058	1037 7/17 0137	1038 7/17 0200	1039 7/17 0235	1040 7/17 0313
Depth (ft.)	Temperature(°F)												
0.0	77.9	77.8	76.5	76.9	76.8	76.9	76.9	77.0	76.9	76.8	77.0	76.0	75.8
2.5	77.9	77.8	76.5	76.9	76.8	76.9	76.9	77.0	76.9	76.8	77.0	76.0	75.8
5.0	77.9	77.8	76.5	76.9	76.7	76.9	76.9	77.0	76.9	76.8	77.0	76.0	75.8
7.5	77.9	77.8	76.5	76.8	76.7	76.9	76.9	77.0	76.9	76.8	77.0	76.0	75.8
10.0	77.9	77.8	76.5	76.7	76.7	76.9	76.9	77.0	76.9	76.8	77.0	76.0	75.8
12.5	77.9	77.8	76.5	76.3	76.5	76.9	76.9	77.0	76.9	76.8	77.0	76.0	75.8
15.0	77.9	77.8	76.5	76.2	75.8	76.9	76.7	77.0	76.9	76.7	77.0	76.0	75.8
17.5	77.9	77.8	74.6	75.0	75.3	76.0	76.0	76.0	76.9	76.2	77.0	76.0	75.8
20.0	77.9	77.0	74.6	74.8	75.1	75.0	75.6	75.8	76.9	75.8	77.0	75.9	75.8
22.5	77.0	76.3	74.6	74.7	75.0	74.3	75.1	75.6	76.5	75.8	76.7	75.3	75.8
25.0	76.3	76.2	74.6	74.5	74.7	74.0	75.0	75.3	75.9	75.7	74.0	75.1	74.2
27.5	76.3		74.4		73.0	72.7	74.5	75.1	75.4	75.1	73.6	75.1	74.1
30.0					72.7	72.1	74.1	75.0	75.2	74.3	73.6	75.0	74.0
32.5					72.5	71.5	73.7	74.6	75.0	73.3		74.5	73.9
35.0						70.9	72.9	74.0	74.2	73.1		73.4	73.8
37.5							72.9	73.7	73.5	70.0		71.0	73.0
40.0							72.9	73.5		65.0		68.0	67.0
42.5								72.9				66.2	64.0

BATHYTHERMOGRAPH RECORDINGS - 1953

[illegible]

[illegible]

BATHYTHERMOGRAPH RECORDINGS - 1953

Station	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080
Date	8/13	8/13	8/13	8/13	8/13	8/13	8/13	8/13	8/13	8/13	8/13	8/13	8/13	8/13
Time	1219	1252	1325	1400	1433	1514	1547	1625	1701	1737	1812	1847	1920	1954
Depth (ft.)	Temperature(°F)													
0.0	75.5	75.5	75.8	76.2	76.0	76.0	75.9	75.9	76.0	76.0	77.5	77.2	77.2	76.7
2.5	75.5	75.5	75.8	76.0	75.7	76.0	75.5	75.9	76.0	76.0	76.5	77.2	76.0	76.6
5.0	75.5	75.2	75.9	76.0	75.1	75.2	75.4	75.2	75.5	75.5	75.2	76.0	75.0	76.7
7.5	75.4	75.1	75.8	75.4	74.9	75.0	74.7	74.8	74.8	74.4	74.8	75.0	74.6	76.0
10.0	75.2	74.9	75.3	75.0	74.8	74.8	74.4	74.4	74.6	74.3	74.7	74.4	74.5	75.0
12.5	75.0	74.7	75.0	74.8	74.6	74.6	74.2	74.2	74.3	74.2	74.5	74.2	74.3	74.4
15.0	74.9	74.6	74.9	74.8	74.4	74.5	74.1	74.0	74.1	74.1	74.3	74.1	74.1	74.2
17.5	74.8	74.5	74.7	74.7	74.2	74.4	74.0	73.9	74.0	74.0	74.2	74.0	74.0	74.0
20.0	74.6	74.5	74.6	74.7	74.1	74.3	74.0	73.8	74.0	74.0	74.1	74.0	74.0	74.0
22.5	74.5	74.3	74.4	74.6	73.9	74.1	73.8	73.7	73.8	73.9	74.0	73.9	73.9	73.9
25.0	74.1	74.1	74.1	74.5	73.9	74.0	73.5	73.5	73.6	73.7	74.0	73.8	73.8	73.8
27.5	74.0	74.0	74.0	74.0	73.8	73.8	73.4	73.3	73.5	73.4	73.6	73.6	73.6	73.6
30.0	74.0	74.0	74.0	74.0	73.8	73.7	73.3	73.1	73.3	73.4	73.5	73.4	73.4	73.1
32.5	74.0	74.0	74.0	74.0	73.7	73.7	73.2	73.0	73.1	73.4	73.5	73.3	73.3	73.1
35.0	74.0	74.0	74.0	74.0	73.7	73.6	73.1	73.0	73.1	73.3	73.4	73.2	73.2	73.0
37.5	74.0	73.9	74.0	74.0	73.6	73.5	73.1	73.0	73.1	73.2	73.4	73.2	73.2	73.0
40.0	74.0	73.9	74.0	74.0	73.5	73.5	73.0	73.0	73.1	73.1	73.2	73.1	73.1	73.0
42.5	61.0	73.8	74.0	74.0	73.4	73.4	73.0	73.0	73.1	73.0	73.2	73.0	73.1	72.9
45.0	56.5	69.0	74.0	74.0	73.3	73.3	73.0	73.0	73.0	73.0	73.1	73.0	73.1	72.5
47.5	56.3	57.0	71.0	73.9	73.2	73.2	73.0	73.0	73.0	73.0	73.1	73.0	73.1	72.0
50.0	56.1	55.8	54.0	62.0	69.0	73.2	73.0	73.0	73.0	73.0	73.1	73.0	73.1	56.3
52.5	56.0	55.5	56.0	54.0	54.0	73.1	73.0	72.9	73.0	73.0	73.1	73.0	73.1	55.5
55.0	56.0	55.5	54.0	53.2	52.5	65.0	72.0	72.9	73.0	73.0	73.0	73.0	73.1	55.5
57.5	56.0	55.5	54.0	53.2	52.3	52.9	59.0	72.8	73.0	73.0	73.0	73.0	73.1	55.4
60.0	56.0	55.4	54.0	53.1	52.3	52.8	53.1	60.5	73.0	73.0	72.9	73.0	63.0	55.4
62.5	55.8	55.3	53.9	53.0	52.2	52.8	53.1	53.0	55.0	71.0	60.0	71.0	55.3	55.4
65.0	55.2	55.2	53.9	53.0	52.2	52.8	53.1	53.0	53.6	56.0	54.0	54.1	55.3	55.4
67.5		55.1	53.9	53.0	52.2	52.8	53.0	53.0	53.6	53.4	53.6	54.1	55.3	55.4
70.0		55.1	53.9	53.0	52.2	52.8	53.0	53.0	53.6	53.4	53.6	54.1	55.3	55.4
72.5			53.9	53.0	52.2	52.8	53.0	53.0	53.6	53.4	53.6	54.1	55.3	55.4
75.0			53.9	53.0	52.2	52.8	53.0	53.0	53.6	53.4	53.6	54.1	55.3	
77.5					52.2	52.8	53.0	53.0	53.6	53.4	53.6			
80.0					52.2	52.8	53.0	53.0	53.6	53.4				
82.5							53.0	53.0	53.6					

BATHYTHERMOGRAPH RECORDINGS - 1953

Station Date Time	1081 8/13 2028	1082 8/13 2108	1083 8/13 2142	1084 8/13 2216	1085 8/13 2250	1086 8/13 2324	1087 8/13 2356	1088 8/14 0030	1089 8/14 0045	1090 8/14 0130	1091 8/14 0200	1092 8/14 0230	1093 8/14 0300	1094 8/14 0330	1095 8/14 0400
Depth (ft.)	Temperature(°F)														
0.0	(poor trace) 76.0	75.0	74.3	74.7	74.2	74.8	74.0	74.9	74.2	73.3	73.4	73.2	73.2	73.5	73.2
2.5	75.9	75.0	74.2	74.6	74.2	74.8	74.0	74.9	74.2	73.3	73.4				
5.0	75.4	74.0	74.1	74.5	74.2	74.8	74.0	74.9	74.2	73.3	73.4	73.2	73.2	73.5	73.2
7.5	74.8	73.2	74.0	74.0	74.2	74.8	74.0	74.9	74.2	73.3	73.3				
10.0	74.5	73.0	73.9	73.5	74.1	74.8	74.0	74.9	74.2	73.3	73.3	73.2	73.2	73.4	73.2
12.5	74.4	72.7	73.6	73.2	73.7	74.6	73.9	74.5	73.7	73.1	73.2				
15.0	74.2	72.5	72.9	72.8	73.5	74.4	73.8	74.1	73.2	73.0	73.2	73.0	73.1	73.2	73.2
17.5	74.0	72.3	72.6	72.7	73.0	74.1	73.6	73.6	73.0	72.9	73.1				
20.0	74.0	72.1	72.5	72.6	72.6	72.9	73.1	73.1	72.8	72.8	73.0	73.0	73.0	73.0	73.1
22.5	73.9	72.0	72.5	72.5	72.2	71.8	73.0	72.9	72.6	72.4	72.6				
25.0	73.7	71.9	72.4	72.3	72.0	71.1	72.7	72.7	72.5	72.0	72.2	72.9	72.7	72.0	72.6
27.5	73.5	71.8	72.3	72.1	71.9	71.0	72.5	72.6	72.2	71.8	72.0				
30.0	73.2	71.6	72.1	72.0	71.8		72.2	72.6	71.9	71.7	71.8	71.9	71.8	71.9	71.8
32.5	73.0	71.5	72.0	71.9	71.6		71.4	72.5	71.7	71.5	71.6				
35.0	73.0	71.4	71.8	71.8	71.2		70.7	72.4	71.6	71.3	71.5	71.5	71.6	71.6	71.6
37.5	72.5	71.2	71.6	71.5	70.0		70.2	72.3	71.5	71.2	71.3				
40.0	62.0	71.0	71.5	68.0	69.2		70.1	72.2	71.4	71.1	71.2	71.0	71.2	71.2	71.4
42.5	53.5	64.0	71.0	65.0	68.5		69.7	72.1	71.3	70.9	70.9				
45.0	53.4	54.0	60.0	64.1	66.0		69.2	72.1	71.2	70.8	70.7	70.8	70.9	71.1	71.3
47.5	53.3	53.0	54.5	63.5	66.0		67.0	72.0	71.1	70.7	70.6				
50.0	53.2	52.9	54.0	63.2			64.6	72.0	71.0	70.6	70.5	70.6	70.8	70.5	70.2
52.5	53.1	52.9	53.7	63.2			61.7	70.4	71.0	70.3	70.4				
55.0	53.0	52.9	53.7	63.2			61.7	68.8	69.9	70.1	70.3	70.1	70.3	70.0	70.1
57.5	53.0	52.9	53.7					65.4	67.0	70.0	70.1				
60.0	52.9	52.9	53.7					62.0	64.0	70.0	69.9	69.7	69.9	69.1	69.2
62.5	52.8	52.9	53.7					60.1	63.5	68.0	67.5				
65.0	52.7	52.9						57.9	63.0	66.0	66.0	66.8	66.0	63.5	64.0
67.5	52.6	52.9													
70.0	52.6							55.0	54.5	61.5	60.0	60.5	56.5	54.5	57.0
75.0								53.0	52.2	56.0	53.9	52.8	51.8	51.0	50.7
80.0								57.0	47.0	52.2	51.4	51.0	49.5	48.9	49.3
85.0								46.6	45.8	49.5	49.0	48.4	48.0	47.9	48.0
90.0								46.2	45.7	48.0	47.2	47.1	46.8	46.8	47.2
95.0								46.0	45.5	46.8	46.1	46.7	46.5	46.3	46.1
100.0								45.6	45.0	46.0	45.1	46.5	46.4	45.2	45.5
105.0								44.0	44.0	44.7	44.8	46.0	45.0	44.3	44.9
110.0								43.2	42.8	44.2	44.1	44.2	44.0	43.9	44.4
115.0								43.0	42.2	43.9	43.8	43.7	43.2	43.3	43.9
120.0								42.7	42.0	43.1	43.0	43.0	42.7	42.8	43.4
125.0								42.6	42.0	42.8	42.8	42.6	42.0	42.2	43.1
130.0									42.0	42.6	42.5	42.0	41.8	41.8	42.3
135.0									41.9	42.2	42.1	41.8	41.6	41.3	41.9
140.0									41.8	41.9	41.7	41.5	41.4	41.2	41.7
145.0									41.7	41.5	41.4	41.4	41.2	41.1	41.3
150.0									41.6	41.1	41.3	41.3	41.2	41.1	41.2
155.0									41.5	41.1	41.2	41.2	41.1	41.1	41.1
160.0									41.5	41.1	41.1	41.1	41.1	41.1	41.1
165.0									41.5	41.1	41.0	41.1	41.1	41.1	41.1
170.0									41.5	41.1	41.0	41.1	41.1	41.1	41.1
175.0									41.5	41.1	41.0	41.1	41.1	41.1	41.1
180.0									41.5	41.0	41.0	41.1	41.1	41.1	41.1
185.0									41.5	41.0	41.0	41.1	41.1	41.1	41.1
190.0									41.5	41.0	41.0	41.1	41.1	41.1	41.1
195.0									41.5	41.0	41.0	41.1	41.1	41.1	41.1
200.0									41.5	41.0	41.0	41.1	41.1	41.1	41.1
205.0									41.5	41.0	41.0	41.1	41.1	41.1	41.1
210.0									41.5	41.0	41.0	41.1	41.1	41.1	41.1

BATHYTHERMOGRAPH RECORDINGS - 1953

Station Date Time	1096 8/14 0430	1097 8/14 0500	1098 8/14 0600	1099 8/14 0530	1100 8/14 0630	1101 8/14 0700	1102 8/14 0730	1103 8/14 0800	1105 8/14 0830	1106 8/14 0900	1107 8/14 0930	1108 8/14 1000	1109 8/14 1030	1110X 8/14 1100	1110 8/14 1130
Depth (ft.)	Temperature(°F)														
0.0	73.1	73.0	73.4	73.0	73.6	73.4	73.8	73.8	73.9	74.1	74.2	74.8	75.0	76.0	76.0
5.0	73.1	73.0	73.4	73.0	73.6	73.4	73.8	73.8	73.9	74.1	74.2	74.2	74.6	74.8	74.5
10.0	73.1	73.0	73.4	73.0	73.5	73.2	73.6	73.7	73.8	74.0	73.9	74.0	74.2	74.3	74.2
15.0	73.0	73.0	73.4	73.0	73.1	73.1	73.5	73.5	73.7	73.5	73.7	73.8	73.8	74.0	73.9
20.0	72.9	72.9	73.2	72.9	72.2	72.5	73.2	73.0	73.4	73.1	73.2	73.4	73.5	73.8	73.9
25.0	72.5	72.1	72.8	72.1	72.0	71.9	72.4	72.5	73.0	72.6	73.0	73.0	73.4	73.4	73.3
30.0	71.7	71.7	72.0	71.7	72.0	71.9	72.0	72.0	72.6	72.0	72.2	72.3	72.7	72.7	72.6
35.0	71.5	71.5	72.0	71.6	72.0	71.9	72.0	72.0	72.0	71.8	72.0	72.0	72.1	72.2	72.1
40.0	71.4	71.4	71.9	71.5	72.0	71.9	72.0	72.0	71.8	71.6	72.0	71.7	71.9	71.7	71.5
45.0	71.1	71.3	71.8	71.2	72.0	71.8	72.0	71.9	71.8	71.4	71.6	71.3	71.5	71.5	71.2
50.0	70.1	70.6	71.5	70.8	71.7	71.7	72.0	71.9	71.8	71.2	71.4	71.2	71.4	71.3	71.2
55.0	70.1	70.2	71.2	70.6	71.2	71.2	71.8	71.6	71.2	71.0	71.2	71.2	71.3	71.2	71.1
60.0	70.0	70.0	70.9	70.0	70.9	71.0	71.4	70.8	70.9	71.0	71.1	71.0	71.0	70.5	71.0
65.0	67.0	67.0	69.0	66.1	70.0	69.5	70.1	69.2	68.5	70.4	68.0	68.0	66.0	68.0	68.5
70.0	57.0	53.0	57.0	55.0	57.5	63.0	60.0	61.0	62.5	60.0	57.0	59.0	56.5	57.0	56.5
75.0	50.6	50.4	50.2	50.9	52.2	52.0	54.5	54.5	52.6	54.0	53.2	53.1	52.1	52.0	51.0
80.0	49.0	49.0	49.5	49.0	50.0	50.4	51.0	51.7	51.5	51.2	51.6	51.2	50.2	50.0	49.0
85.0	47.4	47.3	48.9	47.7	49.2	49.9	49.8	50.2	50.0	50.0	50.0	49.8	49.0	47.9	46.9
90.0	46.8	46.9	47.4	46.9	47.8	48.5	48.4	48.0	48.9	49.0	48.5	48.5	47.0	46.1	45.9
95.0	46.0	46.1	46.2	45.8	46.2	47.0	46.9	46.4	46.8	47.2	46.7	46.2	46.0	45.6	45.2
100.0	45.1	45.4	45.5	45.0	45.9	46.2	46.0	46.0	46.0	46.5	46.2	45.7	45.2	45.1	45.0
105.0	44.9	44.8	45.1	44.8	45.2	45.7	45.1	44.9	45.2	45.6	45.8	45.1	45.0	45.0	44.9
110.0	44.8	44.0	44.1	43.7	44.7	45.0	43.9	44.2	44.9	45.1	45.1	45.0	44.9	44.2	44.0
115.0	43.8	43.3	43.3	42.9	43.8	43.9	43.3	43.7	44.0	44.9	44.4	44.9	44.2	43.5	43.2
120.0	43.2	42.9	42.6	42.1	43.0	43.1	42.9	43.0	43.2	43.9	43.8	43.9	43.3	42.9	42.0
125.0	42.5	42.4	42.2	41.9	42.6	42.7	42.9	42.7	42.9	43.1	43.1	43.6	42.0	42.2	42.1
130.0	41.9	42.0	42.0	41.7	42.0	42.1	42.0	42.2	42.4	42.6	42.4	42.5	42.1	42.0	42.0
135.0	41.9	41.7	42.0	41.4	41.9	41.9	41.9	42.0	42.0	42.1	42.1	42.1	42.0	42.0	42.0
140.0	41.5	41.4	41.9	41.2	41.8	41.7	41.9	42.0	42.0	42.0	42.1	42.0	42.0	42.0	42.0
145.0	41.3	41.2	41.6	41.2	41.8	41.7	41.8	41.9	42.0	42.0	41.9	42.0	41.9	42.0	41.9
150.0	41.2	41.2	41.5	41.1	41.7	41.6	41.8	41.8	41.9	41.9	41.9	41.9	41.9	42.0	41.9
155.0	41.2	41.1	41.2	41.1	41.6	41.4	41.5	41.8	41.9	41.8	41.9	41.9	41.9	41.9	41.9
160.0	41.1	41.1	41.2	41.1	41.5	41.3	41.5	41.7	41.9	41.8	41.7	41.9	41.9	41.9	41.9
165.0	41.1	41.1	41.2	41.1	41.5	41.2	41.4	41.7	41.9	41.7	41.7	41.9	41.9	41.9	41.9
170.0	41.1	41.1	41.2	41.1	41.5	41.2	41.4	41.7	41.9	41.7	41.7	41.8	41.9	41.8	41.9
175.0	41.1	41.1	41.2	41.1	41.5	41.2	41.2	41.7	41.7	41.7	41.7	41.8	41.8	41.8	41.9
180.0	41.1	41.1	41.2	41.1	41.5	41.2	41.2	41.7	41.5	41.7	41.7	41.8	41.8	41.8	41.7
185.0	41.1	41.1	41.2	41.1	41.5	41.2	41.2	41.7	41.5	41.6	41.6	41.8	41.6	41.6	41.5
190.0	41.1	41.1	41.2	41.1	41.5	41.2	41.2	41.7	41.5	41.5	41.5	41.5	41.5	41.5	41.5
195.0	41.1	41.1	41.2	41.1	41.5	41.2	41.2	41.7	41.5	41.5	41.5	41.5	41.5	41.5	41.5
200.0	41.1	41.1	41.2	41.1	41.5	41.2	41.2	41.7	41.5	41.5	41.5	41.5	41.5	41.5	41.5
205.0	41.1	41.1		41.1			41.2	41.7	41.5	41.5	41.5	41.5	41.5	41.5	41.5
210.0	41.1	41.1		41.1			41.2	41.7	41.5	41.5	41.5	41.5	41.5	41.5	41.5

BATHYTHERMOGRAPH RECORDINGS - 1953

Station Date Time	1111 8/14 1200	1112 8/14 1230	1113 8/14 1300	1114 8/14 1330	1115 8/14 1400	1116 8/14 1430	1117 8/14 1500	1118 8/14 1530	1119 8/14 1600	1120 8/14 1630	1121 8/14 1700	1122 8/14 1730	1123 8/14 1800	1124 8/14 1830	1125 8/14 1900
Depth (ft.)	Temperature(°F)														
0.0	76.0	77.0	77.1	77.0	76.3	77.0	76.0	75.5	75.0	75.0	74.9	74.9	74.9	74.0	74.0
5.0	74.7	74.8	74.8	74.9	75.4	75.5	75.0	75.2	75.0	75.0	74.9	74.9	74.9	74.0	74.0
10.0	74.1	74.2	74.3	74.4	74.3	74.3	74.0	74.5	75.0	75.0	74.6	74.5	74.8	74.0	74.0
15.0	74.0	74.0	74.0	74.0	73.9	73.9	73.1	73.6	74.0	74.5	73.5	74.0	74.5	74.0	74.0
20.0	73.7	73.7	73.6	73.5	73.0	73.0	72.7	73.0	73.5	73.7	72.5	73.1	74.0	73.9	74.0
25.0	73.3	73.2	73.0	72.8	72.5	72.5	72.0	72.5	72.9	72.9	72.0	72.8	73.0	72.3	73.7
30.0	72.8	72.7	72.5	72.2	71.9	71.9	71.8	72.0	72.0	72.2	71.8	72.2	72.0	72.1	73.7
35.0	72.3	72.2	72.0	71.8	71.7	71.7	71.7	71.9	72.0	71.9	71.8	71.8	71.8	71.9	73.7
40.0	71.9	71.9	71.7	71.6	71.6	71.5	71.6	71.7	71.9	71.7	71.8	71.8	71.8	71.6	72.0
45.0	71.6	71.6	71.3	71.4	71.3	71.5	71.4	71.5	71.7	71.5	71.6	71.7	71.8	71.5	71.8
50.0	71.2	71.2	71.0	71.1	71.2	71.4	71.2	71.3	71.4	71.5	71.3	71.4	71.5	71.2	71.5
55.0	71.1	71.0	70.9	71.0	71.0	70.8	71.1	71.0	70.9	71.0	70.9	71.0	71.2	71.0	71.3
60.0	70.9	70.8	70.7	70.9	70.0	70.2	61.5	70.4	70.5	70.5	70.7	70.8	71.0	70.8	71.0
65.0	68.0	69.0	66.0	64.3	60.5	63.0	56.0	62.5	62.0	64.0	63.0	64.0	64.0	65.0	66.0
70.0	55.5	56.0	56.0	56.9	57.0	57.2	51.5	56.5	55.0	58.0	56.0	58.0	61.0	62.0	62.5
75.0	50.6	50.7	51.4	52.5	52.8	53.1	50.0	51.0	51.0	53.0	52.0	53.5	55.5	56.0	56.5
80.0	48.1	48.6	49.2	49.9	50.0	49.9	47.0	49.9	49.9	50.0	50.0	50.5	50.5	51.0	51.4
85.0	46.4	48.5	46.7	46.8	47.1	48.0	46.1	47.5	48.0	48.5	48.6	49.0	49.9	49.3	50.0
90.0	45.9	45.9	45.9	45.9	46.2	46.1	45.5	46.6	46.6	47.1	47.5	47.2	48.5	48.4	49.0
95.0	45.4	45.2	45.3	45.4	45.6	45.2	45.0	46.1	45.9	46.1	46.3	46.3	47.0	47.0	47.3
100.0	45.0	45.0	45.0	45.2	45.3	45.0	44.9	45.5	45.4	45.5	45.6	45.5	46.0	46.0	46.0
105.0	44.9	44.6	44.6	45.1	44.9	44.5	44.0	45.0	45.1	45.0	45.1	45.0	45.2	45.0	45.0
110.0	43.9	44.0	44.0	43.9	44.0	43.9	43.6	44.5	44.4	44.3	44.4	44.0	44.8	44.5	44.8
115.0	43.2	43.2	43.3	43.3	43.7	43.5	43.2	43.8	43.9	43.7	43.7	43.8	44.0	43.9	44.0
120.0	42.6	42.7	42.9	42.9	43.2	43.1	42.9	43.3	43.2	43.1	43.3	43.3	43.8	43.4	43.4
125.0	42.1	42.2	42.5	42.5	42.9	42.8	42.5	43.3	42.9	43.0	43.1	43.1	43.0	42.5	42.8
130.0	42.0	42.0	42.1	42.2	42.5	42.4	42.0	42.3	42.7	42.1	42.6	42.9	42.6	42.0	42.4
135.0	42.0	42.0	41.9	42.0	42.1	42.1	42.0	42.0	42.1	42.0	42.2	42.2	42.0	41.9	42.3
140.0	42.0	42.0	41.9	42.0	42.0	42.0	41.9	41.9	42.0	41.9	41.9	42.0	41.9	41.9	41.9
145.0	42.0	42.0	41.9	41.9	41.9	41.8	41.9	41.7	41.9	41.9	41.8	41.9	41.9	41.9	41.8
150.0	41.9	41.9	41.9	41.9	41.9	41.8	41.9	41.5	41.7	41.9	41.8	41.9	41.8	41.8	41.8
155.0	41.9	41.9	41.9	41.9	41.8	41.8	41.5	41.5	41.7	41.9	41.8	41.8	41.8	41.7	41.8
160.0	41.9	41.9	41.9	41.9	41.8	41.8	41.5	41.5	41.7	41.8	41.8	41.8	41.8	41.6	41.8
165.0	41.9	41.8	41.9	41.9	41.8	41.8	41.5	41.5	41.7	41.8	41.8	41.8	41.5	41.6	41.7
170.0	41.8	41.8	41.9	41.9	41.8	41.5	41.5	41.5	41.7	41.8	41.8	41.8	41.5	41.6	41.6
175.0	41.8	41.8	41.8	41.9	41.8	41.5	41.5	41.5	41.7	41.7	41.7	41.7	41.5	41.6	41.6
180.0	41.7	41.7	41.6	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.6
185.0	41.5	41.5	41.4	41.5	41.4	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
190.0	41.5	41.5	41.4	41.5	41.4	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
195.0	41.5	41.4	41.4	41.5	41.4	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
200.0	41.5	41.4	41.4	41.5	41.4	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
205.0	41.5	41.4	41.4	41.5	41.4	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
210.0	41.5	41.4	41.4	41.5	41.4	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5

BATHYTHERMOGRAPH RECORDINGS - 1953

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BATHYTHERMOGRAPH RECORDINGS - 1953

Station Date Time	1140 8/14 2200	1141 8/14 2230	1142 8/14 2300	1143 8/14 2330	1146 8/14 2400	1147 10/8 1048	1148 10/15 0820	1149 10/15 0836	1150 10/15 0853	1151 10/15 0912	1152 10/15 0928	1153 10/15 0947	1154 10/15 1004	1155 10/15 1020	1156 10/15 1036
Depth (ft.)	Temperature(°F)														
0.0	74.6	74.2	74.1	74.0	74.0	58.9	64.4	57.0	57.2	57.8	58.8	59.4	58.8	57.7	57.9
2.5	74.5	74.2	74.1	74.0	74.0	58.9	64.4	57.0	57.2	57.8	58.8	59.4	58.8	57.7	57.9
5.0	74.5	74.2	74.1	74.0	74.0	58.9	64.0	57.0	57.2	57.7	58.8	59.4	58.8	57.7	57.9
7.5	74.5	74.2	74.1	74.0	74.0	58.9	63.9	57.0	57.2	57.7	58.8	59.4	58.8	57.7	57.9
10.0	74.5	74.2	74.1	74.0	74.0	58.9	63.8	57.0	57.2	57.6	58.8	59.4	58.8	57.7	57.9
12.5	74.4	74.2	74.1	74.0	74.0	58.9	63.5	57.0	57.2	57.6	58.8	59.4	58.8	57.7	57.9
15.0	74.4	74.1	74.1	74.0	74.0	58.9	63.0	57.0	57.2	57.6	58.8	59.4	58.8	57.7	57.9
17.5	74.3	74.1	74.0	74.0	74.0	58.9	62.0	57.0	57.2	57.6	58.8	59.4	58.8	57.7	57.9
20.0	74.2	74.1	74.0	74.0	74.0	58.9	61.9	57.0	57.2	57.6	58.8	59.4	58.8	57.7	57.9
22.5	74.1	74.0	73.9	73.9	73.8	58.9	61.9	57.0	57.2	57.6	58.8	59.4	58.8	57.7	57.9
25.0	74.1	74.0	73.9	73.9	73.6	58.9	61.9	57.0	57.2	57.6	58.8	59.4	58.8	57.7	57.9
27.5									57.2	57.6				57.7	
30.0	73.5	73.9	73.5	73.5	73.2					57.6					
35.0	72.9	73.0	73.0	72.4	73.0										
40.0	72.0	71.0	72.2	71.8	72.0										
45.0	71.6	71.6	71.5	71.2	71.5										
50.0	71.5	71.2	71.0	71.0	71.2										
55.0	70.7	71.0	71.0	70.7	70.0										
60.0	69.0	70.2	69.0	67.2	67.0										
65.0	61.5	65.4	64.0	64.0	66.0										
70.0	52.0	55.0	54.0	54.5	61.3										
75.0	50.2	50.5	50.5	50.9	51.9										
80.0	50.0	49.6	49.0	50.0	51.0										
85.0	48.0	47.9	48.0	48.0	49.0										
90.0	47.0	47.0	47.0	46.9	47.7										
95.0	46.4	46.4	46.1	46.0	46.8										
100.0	45.8	45.5	45.8	45.5	46.0										
105.0	44.9	45.0	45.3	44.9	45.4										
110.0	43.9	44.0	44.9	44.0	44.4										
115.0	43.0	43.2	43.7	43.5	43.5										
120.0	42.9	42.8	42.9	42.9	42.9										
125.0	42.7	42.6	42.5	42.7	42.8										
130.0	42.3	42.4	42.3	42.4	42.3										
135.0	42.1	42.1	42.1	42.2	42.1										
140.0	42.0	42.0	42.0	42.0	42.0										
145.0	41.9	42.0	42.0	42.0	42.0										
150.0	41.9	42.0	41.9	41.9	42.0										
155.0	41.9	41.9	41.9	41.9	42.0										
160.0	41.9	41.9	41.9	41.9	42.0										
165.0	41.9	41.9	41.9	41.9	42.0										
170.0	41.9	41.9	41.9	41.9	42.0										
175.0	41.9	41.9	41.9	41.9	42.0										
180.0	41.9	41.9	41.9	41.8	42.0										
185.0	41.9	41.9	41.8	41.6	42.0										
190.0	41.6	41.5	41.6	41.5	41.7										
195.0	41.5	41.5	41.5	41.5	41.5										
200.0	41.5	41.5	41.5	41.5	41.5										
205.0	41.5	41.5	41.5	41.5	41.5										
210.0	41.5	41.5	41.5	41.5	41.5										
215.0	41.5														

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BATHYTHERMOGRAPH RECORDINGS - 1953

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BATHYTHERMOGRAPH RECORDINGS - 1954

Station	1209	1210	1211	1212	1213	1214	1215	1217	1218	1219	1220	1221	1222	1223	1224	1225
Date	4/27	4/27	4/27	4/27	4/27	4/27	4/30	4/30	4/30	4/30	4/30	5/7	5/7	5/7	5/7	5/7
Time	0850	0903	0919	0940	0958	1015	1325	1347	1400	1410	1452	1010	1222	1235	1244	1255
Depth (ft.)	Temperature(°F)															
0.0	62.5	61.6	60.0	58.9	57.8	56.7	56.8	60.2	61.5	62.5	62.5	52.2	53.0	52.5	52.3	53.3
2.5	62.5	61.6	60.0	58.9	57.8	56.7	56.5	60.2	61.3	62.5	62.4	52.2	53.0	52.5	52.3	53.3
5.0	62.5	61.6	60.0	58.9	57.8	56.7	56.2	60.2	61.1	62.2	62.4	52.2	53.0	52.5	52.3	53.3
7.5	62.5	61.6	60.0	58.9	57.8	56.7	56.0	60.2	61.0	62.0	62.1	52.1	53.0	52.5	52.3	53.3
10.0	62.5	61.6	60.0	58.9	57.7	56.7	55.8	60.2	60.7	62.0	62.0	52.0	53.0	52.5	52.3	53.3
12.5	62.5	61.4	60.0	58.8	57.7	56.7	55.5	60.1	60.7	61.8	61.5	52.0	53.0	52.5	52.3	53.3
15.0	62.5	61.4	60.0	58.7	57.6	56.7	55.1	60.0	60.7	61.7	61.4	52.0	53.0	52.5	52.3	53.3
17.5	62.4	61.3	60.0	58.5	57.5	56.7	55.0	59.8	60.7	61.5	61.4	52.0	53.0	52.5	52.3	53.2
20.0	62.4	61.3	59.9	58.3	57.5	56.7	54.9	59.6	60.4	61.5	61.4	52.0	53.0	52.5	52.3	53.1
22.5	62.4	61.2	59.8	58.2	57.4	56.7	54.8	59.4	60.2	61.5	61.3	52.0	52.9	52.5	52.3	53.0
25.0	62.4	61.2	59.8	58.2	57.3	56.7	54.8	59.3	60.1	61.5	61.3	52.0	52.9	52.5	52.3	53.0
27.5	62.3	61.2	59.8	58.2	57.0	56.5	54.8	59.2	60.1	61.5	61.2	52.0	52.9	52.4	52.3	53.0
30.0		61.1	59.8	58.2		56.4	54.8	59.2		61.4	61.2		52.9	52.4	52.3	53.0

BATHYTHERMOGRAPH RECORDINGS - 1954

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BATHYTHERMOGRAPH RECORDINGS - 1954

Station	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256
Date	6/21	6/21	6/21	6/21	6/21	6/21	6/21	6/21	6/21	6/22	6/22	6/22	6/22	6/22	6/22
Time	1020	1053	1122	1157	1230	1304	1335	1453	1659	0835	0905	0937	1040	1144	1247
Depth (ft.)	Temperature(°F)														
0.0	73.3	71.2	69.9	70.0	71.5	72.1	72.0	72.0	70.1	72.2	68.1	69.0	67.4	68.7	69.5
2.5	73.0	71.1	69.5	69.8	71.3	72.0	72.0	71.5	70.1	72.1	68.1	69.0	67.4	68.7	69.5
5.0	72.7	71.0	69.3	69.5	71.0	71.8	72.0	71.0	70.1	72.1	68.1	69.0	67.4	68.7	69.4
7.5	72.0	70.8	69.0	69.2	70.5	71.5	72.0	70.1	70.1	72.1	68.1	69.0	67.4	68.7	69.2
10.0	71.9	70.6	68.5	68.5	69.9	70.9	70.0	70.0	70.1	72.1	68.1	69.0	67.4	68.7	69.0
12.5	71.8	70.5	67.9	68.2	69.8	70.0	69.8	69.5	70.0	72.1	68.1	68.9	67.2	68.6	68.9
15.0	71.8	70.3	67.8	68.0	69.5	69.9	69.4	68.8	68.9	72.0	68.1	68.8	67.0	68.5	68.8
17.5	71.7	70.2	67.0	67.3	68.9	69.5	69.2	68.5	68.0	69.5	68.0	68.5	66.6	68.3	62.8
20.0	71.5	70.0	65.0	67.0	66.0	69.0	69.0	66.0	67.9	67.0	67.8	68.1	64.9	68.0	62.4
22.5	71.3	67.0	63.0	62.5	60.5	68.2	68.0	64.7	67.7	64.9	67.4	66.1	64.0	66.5	61.5
25.0	69.0	61.5	61.1	57.0	55.0	66.3	63.5	64.5	67.3	64.2	67.0	64.9	60.3	58.0	65.0
27.5	62.0	56.0	59.1	55.9	54.0	64.5	58.0	63.6	61.0	61.0	66.1	63.5	55.0	54.6	61.5
30.0	61.2	54.3	56.0	54.0	53.7	59.0	55.0	63.0	55.0	60.9	65.1	60.4	54.8	54.1	60.1
32.5	60.7	54.3	55.0	53.0	53.3	55.4	54.0	61.0	54.5	60.9	64.1	58.0	54.4	54.0	59.1
35.0	60.5	54.2	54.0	52.8	53.1	53.8	53.2	58.5	53.9	60.9	61.2	56.1	54.1	53.8	57.9
37.5	60.0	54.2	53.4	52.6	52.9	53.5	53.1	57.0	53.7	60.9	59.0	55.0	54.0	53.6	53.8
40.0	59.5	54.1	53.2	52.4	52.8	53.3	53.1	56.0	53.4		56.6	54.9	53.9	53.4	53.7
42.5	59.0	54.1	53.1	52.2	52.5	53.1	53.0		53.8		56.0	54.8	53.7	53.2	53.6
45.0			53.1	52.1	52.0	53.0	53.0		52.6		55.9	54.5	53.5	53.0	53.5
47.5			53.1	52.0	51.9	52.9	53.0		52.3		55.6	54.1	53.3	52.8	53.5
50.0			53.0	51.9	51.5	52.8	52.9		52.2		54.0	53.8	53.1	52.4	53.5
52.5				51.8	51.1	52.8	52.9		52.2		53.9	53.8	53.0	52.1	53.4
55.0				51.3	51.0	52.7	52.9		52.2		53.9	53.3	53.0	51.8	53.4
57.5				50.0	50.4	52.0	52.8		52.2		53.9	52.5	52.6	51.8	53.4
60.0				49.9	49.5	51.9	52.8		52.2		53.9	51.4	49.0	51.8	53.4
62.5				49.9	48.9	51.0	52.8		52.2		53.9	48.1	47.6	51.8	53.4
65.0				49.9	48.9	50.5	52.8		52.2		53.9	46.9	47.6	51.8	53.4
67.5					48.9	50.2	52.8		52.2		53.9	46.9	47.6	51.8	
70.0							52.8		52.2			46.9	47.6	51.8	
72.5												46.9	47.6	51.8	
75.0												46.9	47.6		
77.5												46.9			

BATHYTHERMOGRAPH RECORDINGS - 1954

Station	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269
Date	6/22	7/2	7/2	7/2	7/2	7/2	7/6	7/6	7/6	7/6	7/7	7/7	7/9
Time	1345	1455	1527	1559	1632	1702	0918	1050	1300	1655	0942	1147	0835
Depth (ft.)	Temperature(°F)												
0.0	68.7	79.7	76.0	75.8	76.0	78.7	75.5	73.5	73.5	73.5	73.8	74.9	72.5
2.5	68.6	79.5	75.6	75.6	75.9	78.6	75.4	73.4	73.4	73.3	73.8	74.9	72.5
5.0	68.0	77.3	74.0	75.5	75.7	78.6	75.2	73.2	73.2	73.1	73.8	74.9	72.5
7.5	67.5	76.9	73.8	74.2	75.1	78.5	75.1	72.9	73.0	73.0	73.7	74.9	72.5
10.0	66.9	76.7	73.7	73.8	73.8	78.4	75.1	72.8	72.9	72.9	73.7	74.9	72.5
12.5	65.6	76.4	73.5	73.2	73.4	77.0	75.1	72.6	72.8	72.8	73.6	74.9	72.5
15.0	64.2	76.0	73.3	73.1	73.3	75.4	75.1	72.6	72.7	72.8	73.4	74.9	72.5
17.5	63.5	75.9	73.2	73.0	73.1	74.5	75.1	72.6	72.7	72.7	73.4	74.9	72.5
20.0	63.3	75.8	73.1	72.9	73.0	74.3	75.1	72.6	72.6	72.6	73.3	74.9	72.5
22.5	62.6	75.0	73.1	72.8	72.9	74.2	75.1	72.6	72.6	72.6	73.2	74.9	72.5
25.0	62.5	75.0	73.0	72.7	72.9	74.1	75.1	72.5	72.5	72.6	73.2	74.9	72.5
27.5	62.4		72.6	72.6	72.8			72.5	72.5	72.6	73.1	74.9	72.5
30.0	62.4		72.1	72.5	72.6			72.5	72.4	72.5	73.1	74.9	72.5
32.5	62.4		71.5	72.2	71.5			72.5	72.4	72.5	73.0		
35.0			70.0	71.6	70.8			72.4	72.3	67.0			
37.5			61.0	70.5	70.2			72.4	72.2	64.0			
40.0			60.0	68.6	69.3			72.3	64.0	60.8			
42.5			59.9	61.4	63.9			60.9	62.1				
45.0			59.9	60.7	62.1				62.1				
47.5				60.5									
50.0				60.1									

BATHYTHERMOGRAPH RECORDINGS - 1954

Station	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282
Date	7/9	7/9	7/9	7/9	7/9	7/9	7/9	7/9	7/12	7/12	7/12	7/12	7/12
Time	0910	0938	1012	1118	1305	1422	1517	1735	0900	0930	1004	1034	1333
Depth (ft.)	Temperature(°F)												
0.0	72.2	70.9	70.5	72.0	73.0	70.9	73.9	75.0	73.8	73.5	72.8	72.6	74.0
2.5	72.2	70.9	70.4	71.9	72.8	70.9	73.9	75.0	73.7	73.3	72.7	72.5	74.0
5.0	72.2	70.9	70.3	71.8	72.6	70.9	73.8	74.9	73.6	73.0	72.6	72.3	74.0
7.5	72.2	70.9	70.2	71.7	72.5	70.9	73.8	74.9	73.3	72.9	72.6	72.2	73.5
10.0	72.1	70.9	70.2	71.6	72.0	70.9	73.7	74.9	73.2	72.8	72.5	72.1	72.2
12.5	72.1	70.8	70.1	71.5	71.6	70.7	73.5	74.9	73.1	72.8	72.5	72.1	72.1
15.0	72.1	70.7	70.1	71.4	71.5	70.6	73.4	74.8	73.0	72.7	72.4	72.1	71.1
17.5	72.1	70.7	70.0	71.3	71.5	70.4	72.9	74.5	72.9	72.6	72.4	72.0	71.0
20.0	72.1	70.6	70.0	71.2	71.5	70.3	72.6	73.0	72.9	72.4	72.3	72.0	71.0
22.5	72.1	70.5	70.0	71.1	71.5	70.1	72.6	72.8	72.9	72.1	72.1	71.8	70.9
25.0	72.1	70.4	69.9	71.0	71.5	70.0	72.6	72.8	72.9	71.9	72.1	71.5	70.8
27.5	72.1	70.3	69.8	70.9	71.5	69.9	72.6	72.8	72.9	71.7	72.0	71.5	70.7
30.0	72.1	70.2	69.7	70.9	71.5	69.9	72.6	72.8		71.4	72.0	71.4	70.6
32.5	72.1	70.2	69.6	70.8	71.5	69.9	72.6			71.2	71.9	71.2	70.5
35.0	72.1	70.1	69.5	70.6	71.5	69.9	72.6			71.0	71.9	71.0	70.5
37.5	72.1	70.0	69.0	70.6	71.5	69.9	72.6			70.8	71.9	71.0	70.5
40.0	72.1	69.9	67.5	70.5	71.5	69.3	72.5			70.5	71.9	70.5	70.0
42.5	71.9	68.0	67.2	70.5	71.5	69.7	72.5			70.0	71.8	70.4	65.5
45.0	71.0	65.0		70.5	71.5	69.5	72.5			70.0	65.5	67.0	65.0
47.5		65.0		65.0	71.4	60.1	72.4						63.4
50.0				63.0	64.2	60.1	63.5						
52.5					63.2	60.1	64.0						
55.0						60.1							

BATHYTHERMOGRAPH RECORDINGS - 1954

Station	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295
Date	7/13	7/13	7/13	7/13	7/13	7/13	7/16	7/16	7/16	7/16	7/16	7/16	7/16
Time	1230	1114	1147	1218	--	--	0822	0852	0922	0952	--	1713	1745
Depth (ft.)	Temperature(°F)												
0.0	75.0	76.5	74.6	74.5	74.1	74.0	74.0	73.9	72.5	72.6	75.0	75.0	75.3
2.5	73.5	76.3	74.6	74.0	74.1	74.0	74.0	73.9	72.5	72.6	75.0	75.0	75.3
5.0	73.1	76.2	74.5	74.0	74.1	73.9	74.0	73.9	72.5	72.6	74.5	75.0	75.3
7.5	73.1	76.1	74.3	73.8	74.1	73.8	74.0	73.9	72.5	72.6	73.9	75.0	75.3
10.0	73.0	76.0	74.3	73.7	74.0	73.6	74.0	73.9	72.5	72.6	72.2	74.6	75.1
12.5	72.9	75.9	74.3	73.6	73.8	73.4	74.0	73.9	72.5	72.5	72.1	74.0	74.6
15.0	72.8	75.5	74.1	73.6	73.7	73.1	74.0	73.9	72.5	72.5	72.0	73.6	74.0
17.5	72.7	75.2	73.9	73.1	73.6	73.0	74.0	73.9	72.5	72.5	71.9	73.6	74.0
20.0	72.5	75.0	73.5	72.8	73.4	72.9	74.0	73.9	72.5	72.5	71.6	73.5	74.0
22.5	71.6	74.6	73.0	72.5	72.9	72.5	73.9	73.9	72.5	72.5	71.6	73.5	73.9
25.0	71.4	74.1	72.5	71.9	72.6	72.2	73.9	73.9	72.5	72.5	71.6	73.3	73.9
27.5	71.3	73.6	71.7	71.5	72.4	71.7	73.9	73.9	72.5	72.5	71.6	73.2	73.8
30.0	71.1	73.0	71.5	71.0	71.0	71.0	73.9	73.9	72.5	72.5	71.6	73.1	73.8
32.5	71.0	72.5	71.1	70.5	70.5	70.5		73.9	72.5	72.5	71.6	73.1	73.7
35.0	71.0		70.6	70.0	69.5	70.5		73.9	72.5	72.4	71.6	73.1	73.7
37.5	71.0		70.0	69.5	69.4			73.9	72.5	72.4	71.6	73.1	73.6
40.0	70.9		68.5	68.5	69.2			73.9	72.5	72.4	71.6	73.1	73.6
42.5	68.0		64.0	67.5	69.1			73.9	72.5	72.4	71.6	69.0	73.5
45.0	64.5		61.1	65.0	69.1			71.0	72.5	72.3	71.6	68.5	70.0
47.5			61.0	64.1	69.0			70.0	66.6	72.2		68.0	70.0
50.0			61.0	63.8	69.0				66.4	63.9		67.5	

BATHYTHERMOGRAPH RECORDINGS - 1954

[illegible]

BATHYTHERMOGRAPH RECORDINGS - 1955

Station	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323
Date	4/4	4/4	4/4	4/4	4/11	4/11	4/27	4/28	4/29	5/2	5/3	5/4	5/26	6/1
Time	0930	0950	1005	1210	0915	1055	1500	1055	1256	1323	1030	1037	1207	1021
Depth (ft.)	Temperature(°F)													
0.0	44.2	40.2	38.0	45.0	46.1	41.2	48.5	54.0	51.2	56.0	55.8	57.7	60.0	62.2
2.5	44.2	40.3	38.0	45.0	46.1	41.2	48.5	53.0	51.0	53.0	55.7	57.6	60.0	62.2
5.0	44.2	40.5	38.0	45.0	46.1	41.2	48.2	52.0	50.2	51.0	55.6	57.6	59.6	62.1
7.5	44.2	40.7	38.0	45.0	45.5	41.1	48.0	51.7	50.0	49.7	55.2	57.5	59.2	62.1
10.0	44.2	40.8	38.0	45.0	45.2	41.0	47.6	51.3	49.9	49.0	55.0	57.2	58.9	62.1
12.5	44.2	40.9	38.0		45.1	41.0	47.6	51.2	49.5	48.1	54.0	56.9	58.8	62.1
15.0	44.2	40.9	38.0		45.0	40.7	47.5	51.1	49.0	47.6	53.1	52.4	58.7	62.0
17.5	44.2	40.9	38.0		44.9	40.5	47.2	51.0	48.5	47.4	52.4	50.7	58.7	62.0
20.0	44.2	40.9	38.0		44.8	40.2	46.9	50.6	46.8	47.2	50.1	49.8	58.6	62.0
22.5	44.2	40.9	38.0		44.8	40.1	46.9	50.5	45.4	47.1	48.2	49.2	58.6	62.0
25.0	44.2	40.9	38.0		44.8	40.0	46.9	50.5	45.2	47.0	47.8	48.9	58.5	62.0
27.5		40.9	38.0		44.7	40.0	46.9	50.5	45.0	46.6	47.6	48.5	58.5	62.0
30.0		40.9	38.0		44.7	40.0	46.9	50.5	44.9	46.1	47.5	48.0	58.5	62.0
32.5			38.0			40.0	46.9	50.5	44.7	45.4	47.5	47.2	58.5	62.0
35.0			38.0			40.0	46.9	50.5	44.3	45.0	47.4	46.4	58.5	62.0
37.5			38.0			40.0	46.9	50.5	44.0	44.3	47.3	46.4	58.2	62.0
40.0			38.0			40.0	46.9	50.5	44.0	44.2	47.2	46.4	57.0	61.9
42.5			38.0			40.0	46.9	50.5	44.0	44.2	47.1		56.7	61.8
45.0			38.0			40.0	46.9	50.5		44.2				61.8
47.5			38.0			40.0	46.9	50.5		44.2				61.2
50.0							46.9							

BATHYTHERMOGRAPH RECORDINGS - 1960

Station Date Time	SY-1 8/30 0750	SY-1 8/30 0810	SY-1 8/30 0830	SY-1 8/30 0900	SY-1 8/30 1000	SY-1 8/30 1100	SY-1 8/30 1200	SY-1 8/30 1300	SY-1 8/30 1400	SY-1 8/30 1500	SY-1 8/30 1600	SY-1 8/30 1700	SY-1 8/30 1800	SY-1 8/30 1900	SY-1 8/30 2000
Depth (ft.)	Temperature(°F)														
0.0	72.3	72.3	72.3	72.3	73.0	73.1	74.0	74.0	74.5	74.1	74.3	75.0	74.5	74.1	74.1
2.5	72.3	72.3	72.2	72.3	73.0	73.1	73.8	73.9	74.0	73.8	74.0	74.9	74.5	74.0	74.0
5.0	72.3	72.3	72.1	72.3	73.0	73.1	73.2	73.6	73.4	73.3	73.6	74.6	74.5	73.9	74.0
7.5	72.3	72.3	72.0	72.3	73.0	72.8	73.0	73.0	72.9	72.8	73.1	74.2	74.1	73.8	74.0
10.0	72.3	72.3	72.0	72.3	73.0	72.3	72.5	72.6	72.2	72.3	72.4	74.0	74.0	73.8	74.0
12.5	72.3	72.3	71.9	72.3	73.0	72.3	72.3	72.6	72.2	72.3	72.4	73.6	73.6	73.3	73.2
15.0	72.3	72.3	71.9	72.3	73.0	72.3	72.3	72.6	72.2	72.3	72.4	72.3	72.3	72.7	72.8
17.5	72.3	72.3	71.8	72.3	73.0	72.3	72.3	72.6	72.1	72.3	72.4	72.3	72.3	72.2	72.8
20.0	72.3	72.3	71.7	72.3	73.0	72.3	72.2	72.6	72.1	72.3	72.4	72.3	72.3	72.2	72.8
22.5	72.3	72.3	71.6	72.3	73.0	72.3	72.2	72.6	72.1	72.3	72.3	72.3	72.3	72.2	72.8
25.0	72.3	72.3	71.4	72.3	73.0	72.3	72.2	72.6	72.1	72.3	72.3	72.3	72.3	72.2	72.8
27.5	72.3	72.3	71.3	72.3	73.0	72.3	72.3	72.6	72.1	72.3	72.2	72.3	72.2	72.1	72.8
30.0	72.3	72.3	71.2	72.3	73.0	72.3	72.1	72.5	72.1	72.3	72.2	72.3	72.1	72.1	72.8
32.5	72.3	72.3	71.1	72.1	72.4	72.1	72.0	72.3	72.1	72.3	72.1	72.3	72.1	72.1	72.8
35.0	71.8	72.1	71.0	71.6	71.9	71.7	71.5	72.0	72.1	72.0	72.0	72.1	72.0	72.1	72.8
37.5	71.0	71.3	69.9	71.2	71.1	71.1	71.0	71.2	71.6	71.0	71.2	71.0	71.0	71.3	72.0
40.0	69.9	69.9	68.0	71.0	69.0	70.5	67.9	70.0	70.9	70.4	70.5	70.4	70.5	70.8	71.0
42.5	52.5	60.2	60.0	57.7	54.0	62.0	53.0	62.0	61.0	62.0	60.0	61.0	62.0	58.0	59.1
45.0	51.0	52.4	52.5	51.0	51.6	51.5	51.8	51.4	51.5	52.4	52.4	53.4	53.3	52.0	53.0
47.5	50.8	51.3	51.5	50.8	51.2	51.3	51.0	51.2	51.4	51.0	50.8	51.0	53.0	51.0	51.9
50.0	50.5	51.0	50.8	50.6	50.9	51.1	50.4	51.0	51.2	50.7	50.7	51.4	51.4	51.0	51.7
52.5	50.4	50.6	50.6	50.6	50.8	51.0	50.4	50.8	51.0	50.6	50.5	51.1	51.2	51.0	51.2
55.0	50.4	50.5	50.4	50.6	50.5	50.7	50.4	50.7	50.7	50.5	50.5	51.0	51.0	51.0	50.3
57.5	50.3	50.4	50.3	50.6	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.9	51.0	51.0	50.3
60.0	50.2	50.3	50.3	50.5	50.2	50.1	50.3	50.1	50.1	50.3	50.3	50.8	50.9	51.0	50.3

BATHYTHERMOGRAPH RECORDINGS - 1960

Station	SY-1	SY-1	SY-1	SY-1	SY-1	SY-1	SY-1	SY-1	SY-1	SY-1	SY-1	SY-1	SY-1	SY-1	SY-1
Date	8/30	8/30	8/30	8/31	8/31	8/31	8/31	8/31	8/31	8/31	8/31	8/31	8/31	8/31	8/31
Time	2100	2200	2300	0000	0100	0200	0300	0400	0500	0600	0700	0750	0810	0830	0900
Depth (ft.)	Temperature(°F)														
0.0	74.0	74.0	73.6	73.7	73.5	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
2.5	74.0	74.0	73.4	73.7	73.5	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
5.0	74.0	74.0	73.4	73.7	73.5	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
7.5	74.0	74.0	73.4	73.7	73.5	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
10.0	74.0	74.0	73.4	73.7	73.5	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
12.5	73.5	74.0	73.4	73.7	73.5	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
15.0	73.0	74.0	73.0	73.7	73.5	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
17.5	72.2	73.5	72.8	73.0	72.5	72.7	73.0	72.8	73.0	73.0	73.0	73.0	73.0	73.0	73.0
20.0	72.2	73.0	72.5	72.6	72.5	72.3	73.0	72.4	73.0	73.0	73.0	73.0	72.6	73.0	73.0
22.5	72.1	72.7	72.5	72.6	72.5	72.3	73.0	72.4	72.8	73.0	72.8	72.8	72.6	72.8	72.7
25.0	72.1	72.2	72.4	72.6	72.5	72.3	73.0	72.4	72.3	72.3	72.7	72.3	72.6	72.4	72.5
27.5	72.1	72.2	72.3	72.6	72.5	72.3	73.0	72.4	72.3	72.3	72.7	72.3	72.6	72.4	72.5
30.0	72.1	72.2	72.3	72.6	72.5	72.3	72.3	72.4	72.3	72.3	72.6	72.3	72.1	72.4	72.5
32.5	72.1	72.2	72.3	72.6	72.5	72.3	72.3	72.4	72.2	72.1	72.4	72.1	71.5	72.4	72.5
35.0	72.1	72.2	72.2	72.6	72.5	72.3	72.3	72.4	72.0	71.4	72.0	71.9	71.0	72.4	72.5
37.5	71.5	72.0	71.9	72.1	71.5	72.0	72.1	71.9	71.6	71.3	71.5	71.5	68.5	71.7	71.6
40.0	70.9	71.9	71.3	71.4	71.0	71.5	71.2	71.6	71.2	71.2	71.0	71.0	60.0	71.0	71.0
42.5	63.0	69.0	62.0	70.7	60.0	62.0	61.0	55.0	70.4	70.2	68.0	70.0	53.4	63.0	65.0
45.0	54.0	54.0	54.0	60.0	51.5	53.0	53.0	51.0	62.0	54.0	63.0	63.5	52.1	55.0	55.0
47.5	53.2	52.2	52.3	52.6	51.3	51.0	52.2	51.0	56.0	52.0	57.0	57.0	52.1	53.3	53.2
50.0	52.2	51.4	51.0	51.3	51.3	51.0	51.2	51.0	51.0	51.4	51.0	51.9	52.0	51.7	51.5
52.5	51.5	50.9	51.0	51.3	51.2	51.0	51.2	51.0	51.0	51.3	51.0	51.7	52.0	51.5	51.3
55.0	50.5	50.9	51.0	51.2	51.1	51.0	51.1	51.0	51.0	51.2	51.0	51.6	51.8	51.3	51.0
57.5	50.4	50.9	51.0	51.1	51.1	51.0	51.0	51.0	51.0	51.1	51.0	51.4	51.5	51.1	51.0
60.0	50.3	50.9	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.3	51.3	51.0	50.9

BATHYTHERMOGRAPH RECORDINGS - 1960

Station Date Time	SY-1 8/31 1000	SY-1 8/31 1100	SY-1 8/31 1200	SY-1 8/31 1300	SY-1 8/31 1400	SY-1 8/31 1500	SY-1 8/31 0810	SY-1 8/31 0830	SY-1 8/31 0900	SY-1 8/31 1000	SY-1 8/31 1100	SY-1 8/31 1200	SY-1 8/31 1300	SY-1 8/31 1400	SY-1 8/31 1500
Depth (ft.)	Temperature(°F)														
0.0	74.0	75.0	75.8	75.5	77.0	75.0	73.0	73.0	73.0	74.0	75.0	75.8	75.5	77.0	75.0
2.5	73.0	74.0	74.0	74.0	76.2	74.7	73.0	73.0	73.0	73.0	74.0	74.0	74.0	76.2	74.7
5.0	73.0	73.7	73.7	74.0	75.0	74.0	73.0	73.0	73.0	73.0	73.7	73.7	74.0	75.0	74.0
7.5	73.0	73.6	73.6	73.7	74.6	74.0	73.0	73.0	73.0	73.0	73.6	73.6	73.7	74.6	74.0
10.0	73.0	73.5	73.5	73.7	74.0	74.0	73.0	73.0	73.0	73.0	73.5	73.5	73.7	74.0	74.0
12.5	73.0	73.4	73.4	73.6	73.7	74.0	73.0	73.0	73.0	73.0	73.4	73.4	73.6	73.7	74.0
15.0	73.0	73.3	73.2	73.6	73.5	74.0	73.0	73.0	73.0	73.0	73.3	73.2	73.6	73.5	74.0
17.5	73.0	73.1	73.1	73.4	73.2	74.0	73.0	73.0	73.0	73.0	73.1	73.1	73.4	73.2	74.0
20.0	73.0	73.0	73.0	73.0	73.0	74.0	72.6	73.0	73.0	73.0	73.0	73.0	73.0	73.0	74.0
22.5	72.8	72.7	72.6	73.0	72.7	73.7	72.6	72.8	72.7	72.8	72.7	72.6	73.0	72.7	73.7
25.0	72.2	72.3	72.5	72.8	72.5	73.5	72.6	72.4	72.5	72.2	72.3	72.5	72.8	72.5	73.5
27.5	72.1	72.3	72.5	72.7	72.3	73.3	72.6	72.4	72.5	72.1	72.3	72.5	72.7	72.3	73.3
30.0	72.0	72.3	72.5	72.7	72.0	73.0	72.1	72.4	72.5	72.0	72.3	72.5	72.7	72.0	73.0
32.5	72.0	72.3	72.5	72.6	72.0	73.0	71.5	72.4	72.5	72.0	72.3	72.5	72.6	72.0	73.0
35.0	72.0	72.2	72.4	72.5	72.0	73.0	71.0	72.4	72.5	72.0	72.2	72.4	72.5	72.0	73.0
37.5	72.0	71.3	72.3	72.3	72.0	72.3	68.5	71.7	71.6	72.0	71.3	72.3	72.3	72.0	72.3
40.0	71.2	71.2	72.0	72.0	71.5	71.4	60.0	71.0	71.0	71.2	71.2	72.0	72.0	71.5	71.4
42.5	70.3	62.0	62.0	64.0	64.0	62.0	53.4	63.0	65.0	70.3	62.0	62.0	64.0	64.0	62.0
45.0	65.0	53.2	54.0	56.0	53.0	53.4	52.1	55.0	55.0	65.0	53.2	54.0	56.0	53.0	53.4
47.5	53.3	52.4	53.4	53.2	53.0	53.2	52.1	53.3	53.2	53.3	52.4	53.4	53.2	53.0	53.2
50.0	52.0	52.0	53.0	53.2	53.0	53.0	52.0	51.7	51.5	52.0	52.0	53.0	53.2	53.0	53.0
52.5	51.7	51.6	53.0	53.0	52.8	52.9	52.0	51.5	51.3	51.7	51.6	53.0	53.0	52.8	52.9
55.0	51.5	51.4	51.0	51.2	51.0	52.6	51.8	51.3	51.0	51.5	51.4	51.0	51.2	51.0	52.6
57.5	51.3	51.3	51.0	51.0	51.0	51.0	51.5	51.1	51.0	51.3	51.3	51.0	51.0	51.0	51.0
60.0	51.1	51.1	51.0	51.0	51.0	51.0	51.3	51.0	50.9	51.1	51.1	51.0	51.0	51.0	51.0

[illegible]

BATHYTHERMOGRAPH RECORDINGS - 1962

Station Date Time	C-15 7/11 0855	C-15 7/11 1500	C-16 7/12 1000	C-17 7/12 1245	C-18 7/13 0920	C-19 7/17 0930	C-19 7/19 0925	C-19 7/19 1300	C-20 7/24 1025	C-21 8/7 1415	C-21 8/8 0850	C-22 8/15 0950	C-23 8/16 0840	C-24 8/21 0925	C-25 8/23 0840	C-26 8/23 1110	C-27 8/23 1445
Depth (ft.)	Temperature(°F)																
0.0	66.3	68.5	70.0	70.0	69.2	70.4	70.7	71.9	71.0	72.0	71.4	69.3	70.0	69.7	70.1	70.4	72.0
2.5	66.3	68.3	69.8	69.6	69.2	70.4	70.7	71.5	71.0	72.0	71.4	69.3	70.0	69.7	70.1	70.4	71.5
5.0	66.3	68.1	69.6	69.3	69.2	70.4	70.7	71.2	71.0	72.0	71.4	69.3	70.0	69.7	70.1	70.4	71.0
7.5	66.3	67.9	69.4	69.0	69.2	70.4	70.7	70.9	71.0	72.0	71.4	69.3	70.0	69.7	70.1	70.4	70.5
10.0	66.3	67.7	69.2	68.6	69.2	70.4	70.7	70.9	71.0	72.0	71.3	69.3	70.0	69.7	70.1	70.4	70.0
12.5	66.3	67.4	69.0	68.3	69.2	70.4	70.7	70.9	71.0	71.5	71.1	69.3	70.0	69.7	70.1	70.4	70.0
15.0	66.3	67.2	68.8	68.0	69.2	70.4	70.7	70.8	71.0	71.3	71.0	69.3	70.0	69.7	70.1	70.4	70.0
17.5	66.3	66.8	68.6	67.8	69.2	70.4	70.7	70.8	71.0	71.1	70.8	69.3	70.0	69.7	70.1	70.4	70.0
20.0	66.3	66.5	68.4	67.6	69.2	70.4	70.7	70.8	71.0	70.9	70.6	69.3	70.0	69.7	70.1	70.4	70.0
22.5	66.3	66.3	68.2	67.4	69.2	70.4	70.7	70.7	71.0	70.5	70.4	69.3	70.0	69.7	70.1	70.4	70.0
25.0	66.3	66.0	68.0	67.2	69.1	70.4	70.7	70.7	71.0	70.1	70.3	69.3	70.0	69.7	70.1	70.3	70.0
27.5	66.3	65.8		67.2	69.1	70.4	70.7	70.7	71.0	69.9	70.0	69.3	70.0	69.7	70.1	70.3	69.9
30.0	66.1	65.6		67.2	69.1	70.4	70.7	70.6	71.0	69.8	69.7	69.3	70.0	69.7	70.1	70.3	69.9
32.5	65.2	65.3		67.2	69.0	70.4	70.7	70.6	71.0	69.6	69.4	69.3	70.0	69.7	70.1	70.3	69.0
35.0	64.4	65.0		67.1	68.0	70.4	70.7	70.4	71.0	69.5	69.0	69.3	70.0	69.7	70.1	70.3	69.0
37.5	64.0	64.7		67.0	67.0	70.4	70.7	70.4	71.0	69.4	68.5	69.3	70.0	69.7	70.1	70.3	69.0
40.0	60.0	64.5		66.9		70.4	70.7	70.4	71.0	69.3	68.0	69.3	70.0	69.7	70.1	70.3	68.8
42.5	55.0	50.5		56.0		70.4	70.7	70.2	71.0	68.0	66.9	69.3	69.5	69.7	70.1	70.2	
45.0	50.0	50.5				70.4	70.7	70.2	71.0	66.2	65.7	69.3	69.3	69.7	70.1		
47.5	50.0	50.5				70.0	70.7	70.2	71.0	64.0	65.6	69.3	69.2	69.7	70.1		
50.0	50.0	50.5				69.6	70.5	71.0	71.0	62.3	65.5	69.3		69.7			
52.5	50.0	50.3				59.3	69.7	67.7	71.0	60.0	65.3	69.3		69.7			
55.0	49.8	50.1				59.0	69.0	65.0	71.0	59.8	65.2	69.3		69.7			
57.5						58.8	65.2	62.5	71.0	59.6	64.4	69.3		69.7			
60.0						58.5	62.6	60.0	71.0		63.7	69.3		69.7			
62.5						57.3	58.2	57.2	67.6			69.0		69.6			
65.0						56.0	55.4	55.3	67.3			63.5		69.5			
67.5						55.5	55.2	55.3	67.1			58.0		57.0			
70.0						55.0	55.0	55.3	66.8			57.7		56.6			
72.5						54.7	54.8	55.3				57.3		56.5			
75.0						54.5	54.6	55.1				57.0		56.4			
77.5												56.7					

BATHYTHERMOGRAPH RECORDINGS - 1963

Station	I-75	I-76	I-77	I-78	I-81	W-14	W-16	W-18	W-30	W-32	W-34	W-36	W-38	W-51
Date	6/3	6/4	6/6	6/7	6/14	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23
Time	1345	1325	1425	1310	1355	0751	0820	0907	1145	1214	1241	1310	1334	1749
Depth (ft.)	Temperature(°F)													
0.0	67.5	72.0	72.0	75.0	71.0	69.0	69.0	69.5	69.5	71.0	70.0	70.5	74.2	70.4
2.5	67.5	71.0	71.2	72.7	71.3	69.0	69.0	69.5	69.3	70.9	69.5	70.6	73.0	70.4
5.0	67.5	70.0	70.3	70.5	71.5	69.0	69.0	69.5	69.0	70.7	69.0	70.7	71.5	70.4
7.5	66.0	69.5	69.8	70.1	69.6	69.0	69.0	69.5	68.8	70.0	69.0	70.0	71.2	70.3
10.0	65.3	69.0	69.4	69.7	67.7	69.0	69.0	69.5	68.5	69.0	68.9	69.0	69.9	70.3
12.5	65.1	68.7	68.8	69.6	67.6	69.0	69.0	69.3	68.5	69.0	68.7	69.0	69.7	70.2
15.0	65.0	68.3	68.3	69.4	67.6	69.0	69.0	69.2	68.5	69.0	68.8	68.9	69.5	70.0
17.5	64.9	67.1	67.4	68.0	67.6	69.0	69.0	69.1	68.5	69.0	68.8	68.9	68.5	69.0
20.0	64.7	65.5	66.5	66.5	67.6	69.0	69.0	69.1	68.5	69.0	68.7	68.9		
22.5	63.1	63.8	65.8	63.6	67.6	69.0	69.0	69.0	68.5	69.0	68.7	68.9		
25.0	61.5	62.0	65.1	60.6	67.6	69.0	69.0			69.0	68.6	68.9		
27.5	61.3		62.0	60.6	67.6	69.0	69.0							
30.0	61.0					69.0	69.0							
32.5	61.0					69.0	69.0							
35.0	61.0													
37.5	60.8													
40.0	60.6													
42.5	60.6													
45.0	60.5													
47.5	60.5													
50.0	60.5													
52.5	60.5													
55.0	60.5													
57.5	60.5													
60.0	60.5													
62.5	60.5													
65.0	60.5													
67.5	60.4													

BATHYTHERMOGRAPH RECORDINGS - 1963

Station	W-53	W-55	W-57	W-59	W-61	W-63	W-81	W-83	W-85	W-87	W-89	W-91	W-93	W-111
Date	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23
Time	1725	1702	1638	1615	1552	1504	0925	0909	0845	0824	0805	0746	0726	0415
Depth (ft.)	Temperature(°F)													
0.0	70.2	71.0	70.0	71.0	72.0	72.0	71.5	71.5	71.0	72.5	73.5	70.5	72.5	72.5
2.5	70.2	70.9	69.8	69.5	69.5	69.3	71.5	71.5	71.0	72.5	73.5	69.7	72.2	72.5
5.0	70.2	70.9	69.3	68.0	67.0	66.6	71.5	71.5	71.0	72.5	73.5	69.0	72.0	72.5
7.5	70.1	69.6	68.7	67.9	66.4	66.5	71.0	71.0	69.5	71.0	72.0	68.0	71.7	72.0
10.0	70.0	68.3	68.0	67.7	65.8	66.5	70.5	70.5	69.0	69.5	69.5	67.0	71.5	71.5
12.5	69.0	68.0	68.0	67.7	65.6	66.5	70.0	70.0	69.0	69.5	69.0	66.5	71.5	70.7
15.0	68.0	67.8	68.0	67.6	65.4		69.5	69.5	69.0	69.5	68.5	66.0	71.5	70.0
17.5	67.9	67.8	68.0	67.6	65.3		69.5	69.5	68.7	69.5	68.5	65.8		
20.0	67.9	67.7	68.0	67.5	65.2		69.5	69.5	68.5	69.5	68.5	65.5		
22.5	67.8	67.7	68.0	66.8	65.1			69.5	68.5	69.5	68.0	65.5		
25.0	67.8	67.7	68.0	66.0	65.0			69.5	68.5	69.5	67.5	65.5		
27.5		67.7	68.0	66.0					68.3	69.0	67.5			
30.0			68.0	66.0					68.0	68.5	67.5			

BATHYTHERMOGRAPH RECORDINGS - 1963

Station	W-113	W-115	W-117	W-119	W-121	W-123	W-142	W-144	W-146	W-148	W-150	W-152	W-154	W-156	W-174
Date	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23
Time	0354	0334	0314	0254	0234	0212	1057	1036	1016	0955	0933	0910	0850	0830	0500
Depth (ft.)	Temperature(°F)														
0.0	72.5	72.0	72.5	71.5	71.5	72.5	72.0	70.5	70.5	71.0	69.5	69.5	68.5	69.0	69.5
2.5	72.3	71.7	72.0	70.5	71.0	71.5	72.0	70.5	70.5	70.7	69.5	69.2	68.5	69.0	69.5
5.0	72.0	71.5	71.5	69.5	70.5	70.5	72.0	70.5	70.5	70.5	69.5	69.0	68.5	69.0	69.5
7.5	71.5	71.0	70.5	69.5	70.0	70.3	71.3	70.5	70.3	70.5	69.5	69.0	68.5	69.0	69.5
10.0	71.0	70.5	69.5	69.5	69.5	70.0	70.5	70.5	70.0	70.5	69.5	69.0	68.5	69.0	69.5
12.5	69.8	70.0	69.5	69.3	69.3	69.8	70.5	70.5	70.0	70.5	69.3	69.0	68.5	69.0	69.5
15.0	69.5	69.5	69.5	69.0	69.0	69.5	70.5	70.5	70.0	70.5	69.0	69.0	68.5	69.0	69.5
17.5	69.5	69.5	69.5	68.8	68.7	69.5		70.5	70.0	70.3	69.0	69.0	68.5	68.7	69.5
20.0	69.5	69.5	69.5	68.5	68.5	69.5		70.5	70.0	70.0	69.0	69.0	68.5	68.5	69.5
22.5	69.5	69.5	69.3	68.5	68.5	69.3		70.5	70.0	70.0	68.7	69.0	68.5	68.5	69.5
25.0	69.5	69.5	69.0	68.5	68.5	69.0		70.5	70.0	70.0	68.5	69.0	68.5	68.5	69.5
27.5	69.5	69.3	68.7	68.3	68.3					69.7	68.5	68.7	68.5	68.2	
30.0	69.5	69.0	68.5	68.0	68.0					69.5	68.5	68.5	68.5	68.0	
32.5												68.2	68.5		
35.0												68.0	68.5		

BATHYTHERMOGRAPH RECORDINGS - 1963

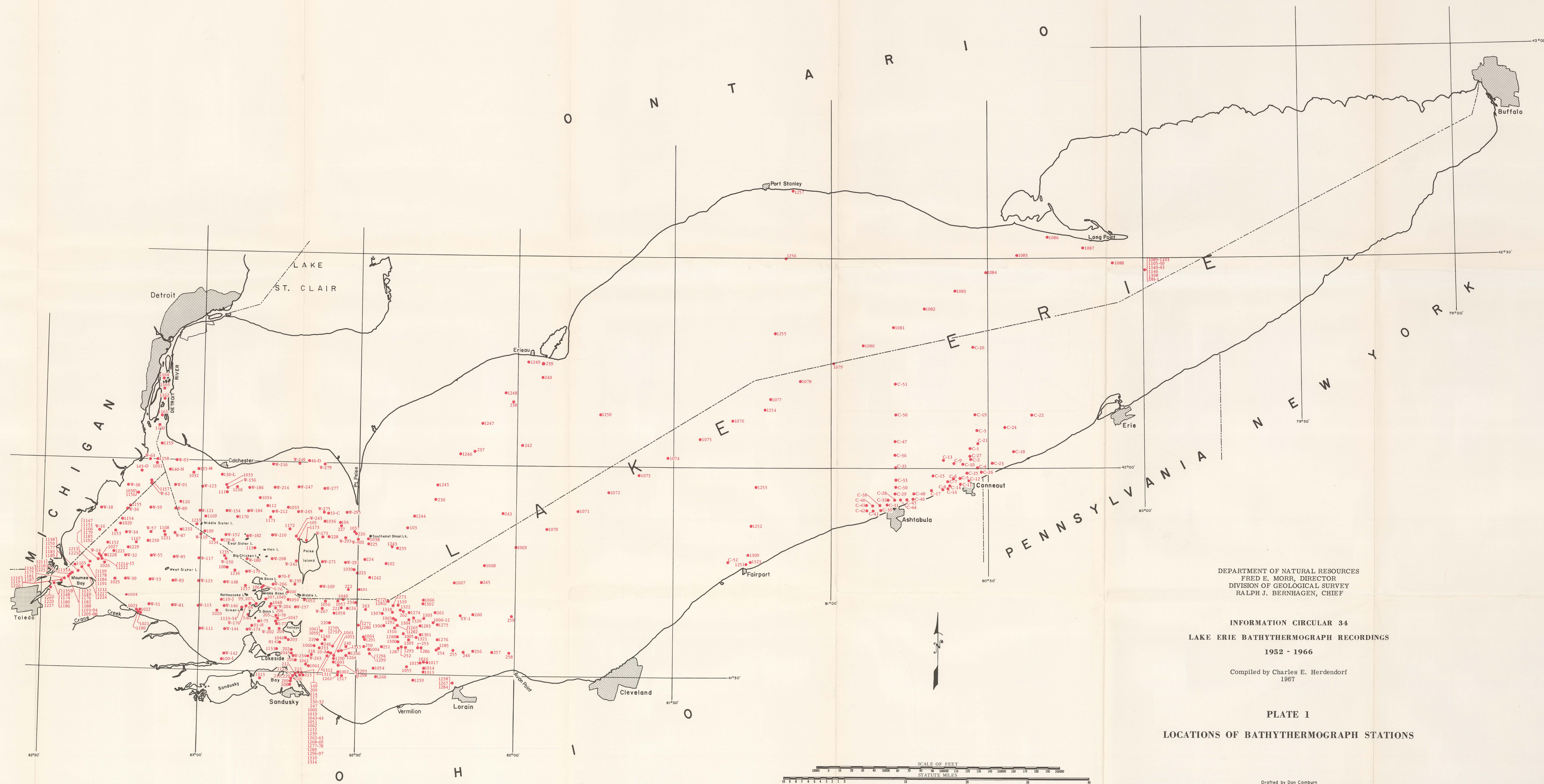
Station	W-176	W-179	W-180	W-182	W-184	W-186	W-202	W-204	W-206	W-208	W-210	W-212	W-214	W-216	W-234
Date	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23	6/23
Time	0520	0540	0600	0620	0637	0655	0825	0841	0857	0815	0835	0852	0906	0920	1040
Depth (ft.)	Temperature(°F)														
0.0	70.0	69.5	69.5	68.0	68.0	68.0	68.5	69.5	69.5	69.5	69.0	69.0	69.0	69.0	69.1
2.5	70.0	69.5	69.5	68.0	68.0	68.0	68.4	69.2	69.2	69.5	69.0	68.7	68.8	69.0	69.1
5.0	70.0	69.5	69.5	68.0	68.0	68.0	68.4	69.0	69.0	69.5	69.0	68.5	68.5	69.0	69.1
7.5	70.0	69.5	69.5	68.0	68.0	68.0	68.3	68.7	68.9	69.5	68.7	68.3	68.2	68.8	68.9
10.0	70.0	69.5	69.5	68.0	68.0	68.0	68.2	68.5	68.8	69.5	68.5	68.0	68.0	68.5	68.7
12.5	70.0	69.5	69.5	68.0	68.0	68.0	68.2	68.4	68.7	69.5	68.5	68.0	68.0	68.5	68.6
15.0	70.0	69.5	69.5	68.0	68.0	68.0	68.2	68.3	68.7	69.5	68.5	68.0	68.0	68.5	68.6
17.5	70.0	69.5	69.5	68.0	68.0	68.0	68.1	68.2	68.6	69.3	68.5	68.0	68.0	68.3	68.5
20.0	70.0	69.5	69.5	68.0	68.0	68.0	68.1	68.1	68.5	69.0	68.5	68.0	68.0	68.0	68.5
22.5	70.0	69.0	69.0	68.0	68.0	68.0		68.0	68.2	69.0	68.5	68.0	67.8	67.7	68.4
25.0	70.0	69.0	69.0	68.0	68.0	68.0		68.0	68.0	69.0	68.5	68.0	67.5	67.5	68.4
27.5	70.0	69.0	69.0	68.0	67.8	67.7		67.8	68.0		68.2	68.0	67.5		
30.0	70.0	69.0	69.0	68.0	67.5	67.5		67.7	68.0		68.0	68.0	67.5		
32.5			69.0		67.5	67.3					67.7	68.0	67.3		
35.0			69.0		67.5	67.0					67.5	68.0	67.0		

[illegible]

BATHYTHERMOGRAPH RECORDINGS - 1963

[illegible]

[illegible]



DEPARTMENT OF NATURAL RESOURCES
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RALPH J. BERNHAGEN, CHIEF

INFORMATION CIRCULAR 34
LAKE ERIE BATHYTHERMOGRAPH RECORDINGS
1952 - 1966

Compiled by Charles E. Herdendorf
1967

PLATE 1

LOCATIONS OF BATHYTHERMOGRAPH STATIONS

Drafted by Don Camburn